CFD-250/260

SERVICE MANUAL

US Model
Canadian Model
CFD-250/260

Australian Model
CFD-250

E Model
CFD-260

Photo : CFD-260

MEGA BASS

Model Name Using Similar Mechanism	CD Section		CFD-703
	Tape Section	CFD-250	CFS-W304
		CFD-260	NEW
Tape Transport Mechanism Type	CFD-250		MF-250-64
	CFD-260	Deck A	MF-260-64PB
		Deck B	MF-260-102
Optical Pickup Block Type			KSM-360AAM

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3-ohm loads, both channels driven from 150-10,000 Hz: rated 3.5 W per channel-minimum RMS power, with no more than 10% total harmonic distortion in AC operation.

Other Specifications

CD Player section

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wave length 780 nm Emission duration: Continuous Laser output: Less than 44.6μW* *This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block.
Spindle speed	200 r/min (rpm) to 500 r/min (rpm) (CLV)
Error correction	Sony Refind Super Strategy Cross Interleave Read Solomon Code
Number of channels	2
Frequency response	20 – 20,000 Hz ±1dB
Wow and flutter	Below measurable limit

Radio section

Frequency range	FM: 87.6 – 108 MHz AM: USA and Canadian models 530 – 1,710 kHz Other models 531 – 1,602 kHz
Antennas	FM: Telescopic antenna AM: Built-in ferrite bar antenna

Tape recorder section and general

Recording system	4-track 2-channel stereo
Fast winding time	Approx. 120 sl with Sony cassette HF60
Speaker	Full range: 8cm dia., cone type

—Continued next page—

使用時は添付資料も参照のこと
Refer to the additional documents.

CD RADIO CASSETTE-CORDER

SONY®

Frequency response
TYPE I (normal) cassette:
50 – 12,000 Hz (EIAJ)

Inputs
Mixing microphone input jack (minijack)
Sensitivity 2.45 mV
For low impedance microphone

Outputs
Headphones jack (stereo minijack)
For 8 – 32 ohms impedance headphones

Power output
Taiwan model:
4.5 W + 4.5 W
(at 3 ohms, 10% harmonic distortion in AC operation)
Other models (except USA model):
4.5 W + 4.5 W
(at 3 ohms, 10% harmonic distortion in DC operation)

Power requirements
For CD radio cassette-corder
Australian model: 240 V AC, 50 Hz
Other models: 120 V AC, 60 Hz
DC 12 V, 8 size D (R20) batteries
For clock/timer/memory
DC 6 V, 4 size AA (R6) batteries
For remote commander
DC 3 V, 2 size AA (R6) batteries

Power consumption
Canadian model: 27 W
Taiwan model: 31 W
Other models: 25 W

Battery life
Batteries for CD radio cassette corder

	FM Recording	Tape Playback	CD playing
Sony SUM-1 (NS)	approx. 4h	approx. 2h	approx. 1h
Sony Alkaline AM1	approx. 12h	approx. 5.5h	approx. 3h

For clock/timer/memory: approx. 1 year

Dimensions
572 × 185 × 230 mm (w/h/d)
($22^5/_8 \times 7^2/_8 \times 9^1/_8$ inches)
incl. projecting parts and controls

Weight
CFD-250 6.4kg (14 lb. 2 oz.)
CFD-260 6.9kg (15 lb. 3 oz.)
(incl. batteries; excl. supplied accessories)

Supplied acceessories
AC power cord (1)
Remote commander (1)

Design and specifications subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

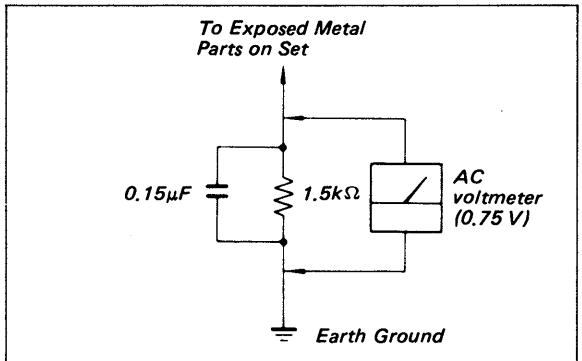


Fig. A. Using an AC voltmeter to check AC leakage.

TABLE OF CONTENTS

Section	Title	Page
SECTION 1. SERVICING NOTE		3
SECTION 2. GENERAL		
	Parts Identification	4
	Power Sources	6
	Setting the Clock	6
	Playing Discs	7
	Adjusting Sound	8
	Listening to the Radio	9
	Playing Back Tapes	10
	Recording CD Sound	11
	Recording Radio Sound	12
	Tape Dubbing	13
	Various Disc Playing Modes	14
	Presetting Radio Stations	17
	Automatic Editing of the CD for Recording by Specifying the Tape Length	18
	Recording programmed Selections	19
	Using the Built-in Timer	20
	Microphone Mixing	23
	Maintenance	24
SECTION 3. DISASSEMBLY		25
SECTION 4. MECHANICAL ADJUSTMENTS		35
SECTION 5. ELECTRICAL ADJUSTMENTS		35
SECTION 6. DIAGRAMS		
6-1.	IC801 (CXP50716-041Q) Pin Function Description	41
6-2.	Circuit Boards Location	42
6-3.	Printed Wiring Board —Tuner Section—	43
6-4.	Schematic Diagram —Tuner Section—	45
6-5.	Printed Wiring Board —CD Section—	48
6-6.	Schematic Diagram —CD Section—	51
6-7.	Printed Wiring Boards —Audio/TC Section—	56
	• Semiconductor Lead Layouts	56
6-8.	Schematic Diagrams —Audio/TC Section—	61
6-9.	Printed Wiring Boards —Control Section—	66
6-10.	Schematic Diagrams —Control Section—	69
	• IC Block Diagrams	71
SECTION 7. EXPLODED VIEWS		
7-1.	Rear Cabinet Section	73
7-2.	Front Cabinet Section	74
7-3.	Upper Cabinet Section (CFD-250)	75
7-4.	Upper Cabinet Section (CFD-260)	76
7-5.	Mechanism Deck Section-1 (CFD-250)	77
7-6.	Mechanism Deck Section-2 (CFD-250)	78
7-7.	Mechanism Deck Section-3 (CFD-250)	79
7-8.	Mechanism Deck Section-4 (CFD-250)	80
7-9.	Mechanism Deck Section-5 (CFD-260)	81
7-10.	Mechanism Deck Section-6 (CFD-260)	82
7-11.	Mechanism Deck Section-7 (CFD-260)	83
7-12.	Mechanism Deck Section-8 (CFD-260)	85
7-13.	CD Chassis Section	86
7-14.	Optical Pickup Section	87
SECTION 8. ELECTRICAL PARTS LIST		88

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

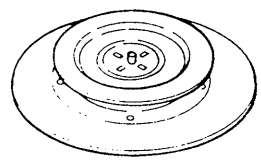
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25 cm away from the objective lens.

CHUCK PLATE JIG ON REPAIRING

On repairing CD section, playing a disc without the CD lid, use Chuck Plate Jig.

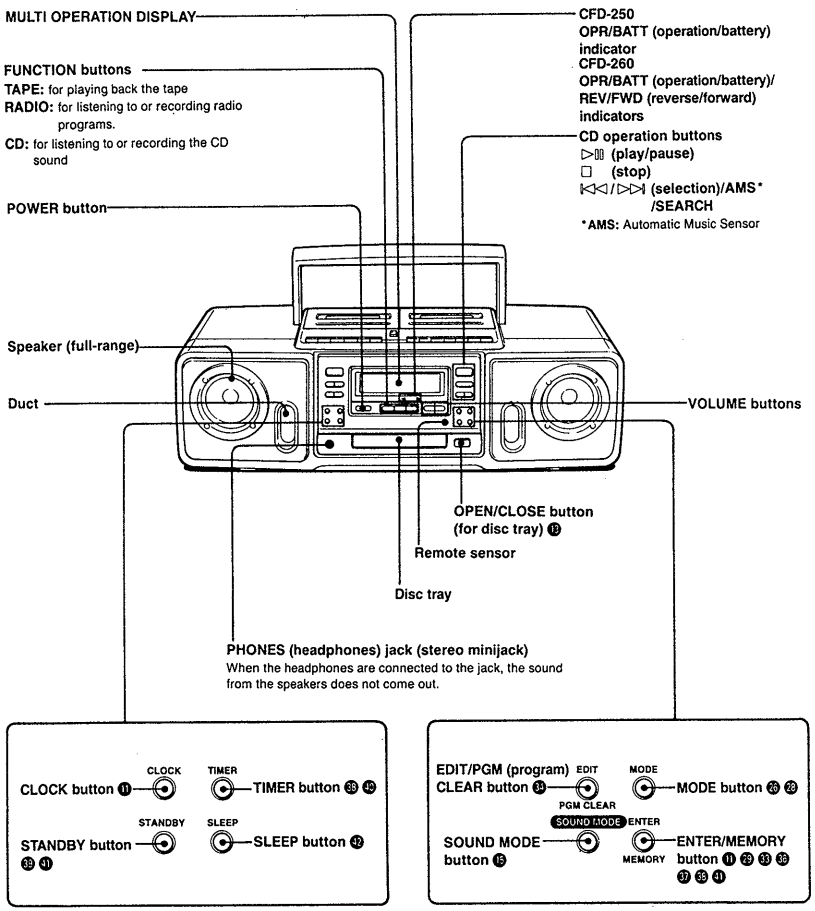
- Code number of Chuck Plate Jig: X-4918-255-1



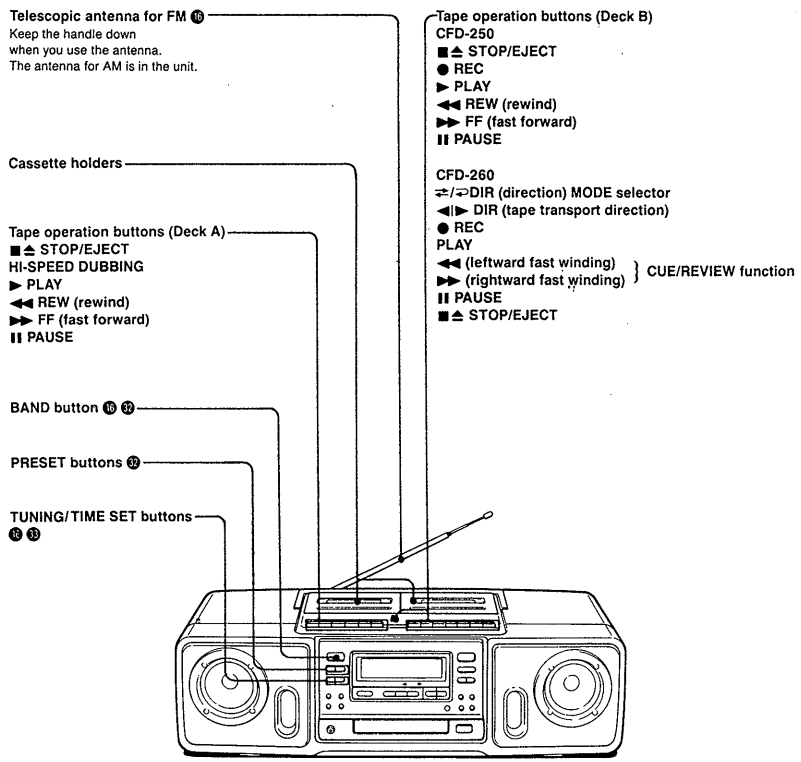
Parts Identification

Refer to the pages indicated in ● for details.

CD Player Section and Clock/Timer Section



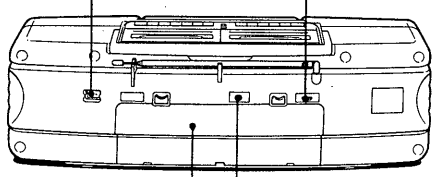
Radio/Cassette-Corder Section



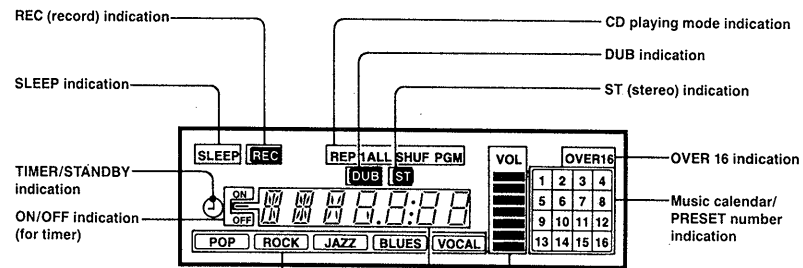
SECTION 2
GENERAL

This section is extracted from instruction manual.

Rear Panel


AC IN (AC power input) socket ⑬
ISS (interference suppress switch) ㉒
Battery compartment ⑱
MIX MIC (mixing microphone) jack (minijack) ㉑

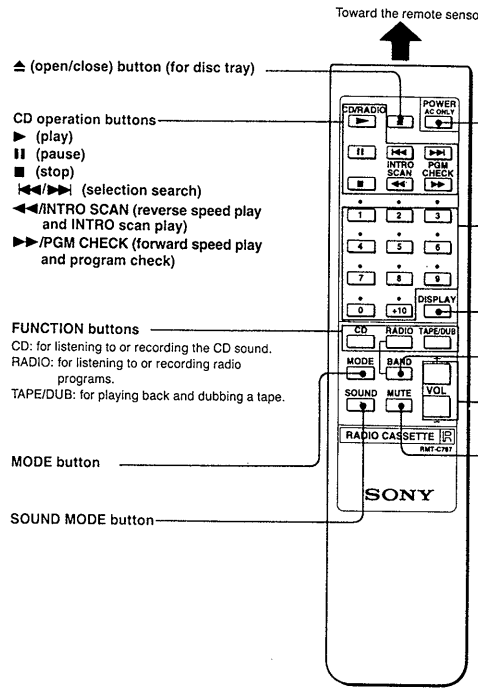
Display Section



Time/frequency display section

Clock display	During CD playing	During radio reception
AM/PM indication appears here.	Playing order/playing time/ remaining time (minute)	FM/AM indication appears here.
Time indication (hour/minute)	Playing time/remaining time (second)	Frequency

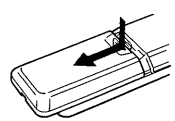
Remote Commander



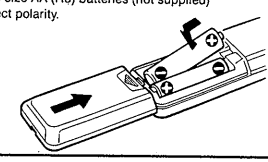
Note on the remote commander
To avoid malfunction, keep the commander away from direct sunlight or strong illumination.

How to install batteries

1



2 Insert two size AA (R6) batteries (not supplied) with correct polarity.



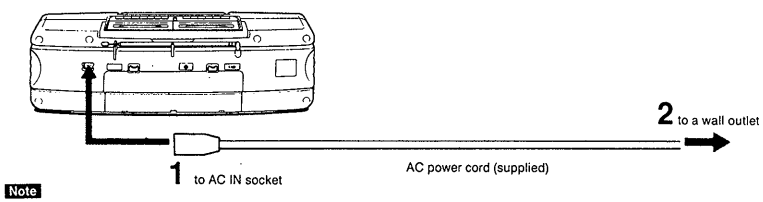
When to replace batteries
Battery life under normal use is about 6 months. When you cannot operate the unit with the remote commander from the distance where you used to operate, replace both batteries with new ones.

Power Sources

Preparation: Insert batteries for clock/timer/memory.
You can use the unit either on house current, or on batteries. In either case, be sure to insert four size AA (R6) batteries (not supplied) for the clock/timer/memory.

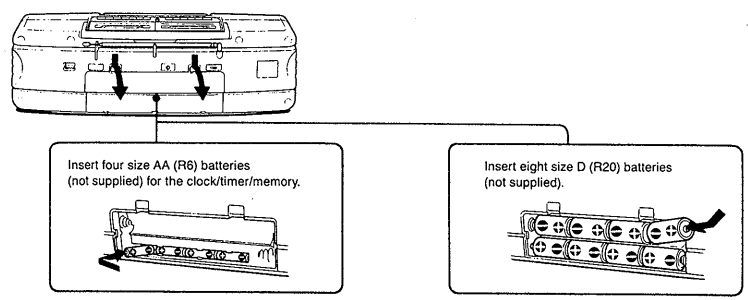
Notes
- When you insert or replace batteries, remove the disc from the unit. The disc may fall out and be damaged.
- When you operate the unit on battereis, be sure to disconnect the AC power cord from the unit. The unit cannot be operated on the internal batteries when the AC power cord is connected to the unit.

House Current



Note
Be sure to use the supplied AC power cord.

Batteries

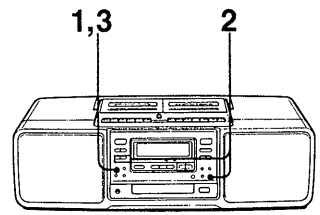


When to replace batteries
When the batteries become weak, the following symptoms appear. Replace all the batteries with new ones. Be sure to connect the AC power cord to the unit and to a wall outlet and turn the power on before you remove the batteries so that the memory for the CD player and radio will not be erased.
- Batteries for the CD/tape/radio operation: The OPR/BATT indicator becomes faint or the power may turn off automatically.
- Batteries for the clock/timer/memory operation: the indications in the display window become faint or the unit may not operate.

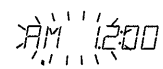
For critical recordings or disc playing
Operating the unit on house current is recommended.

Setting the Clock

Insert four size AA (R6) batteries for the clock/timer/memory in the battery compartment, and connect the supplied AC power cord to the unit or insert eight size D (R20) batteries.

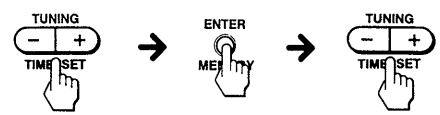


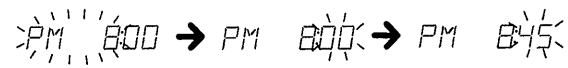
1 Keep pressing CLOCK for about 4 seconds until "AM" or "PM" and the hour digits flash.



2 Set the hour and minute by pressing TUNING/TIME SET and ENTER/MEMORY.

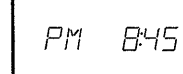
Example: To set to 8:45 p.m.





3 Press CLOCK again.

The clock starts from 00 second.

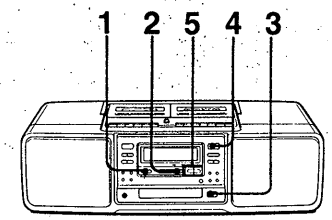


The clock employs the 12-hour system
AM 12:00 = midnight
PM 12:00 = noon

To check the time during CD or radio operation
Press the CLOCK button. The current time is displayed for about 4 seconds.

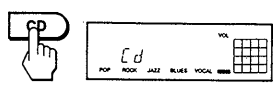
Playing Discs

You can operate the unit with the supplied remote commander.
You can play an 8 cm (3-inch) CD without an adaptor.

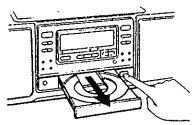


1 Press POWER.

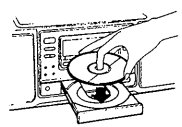
2 Press CD.



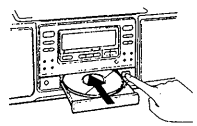
3 [1] Press OPEN/CLOSE.



[2] Insert a disc with label surface up.



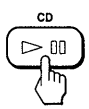
[3] Press OPEN/CLOSE.

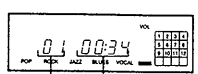


Note

Be careful so that your finger will not get caught when you close the disc tray.

4 Press ▷II.
Playing starts from the beginning of the disc.

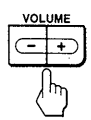




Selection number being played

Elapsed playing time

5 Adjust the volume.



To stop playing the CD

	The button to be pressed	
	Unit	Remote commander
Pause for a moment	▷II	II
Resume play after pause	▷II	II
Stop play	□	■
Remove the disc	First □, then OPEN/CLOSE	First ■, then ⏏

To turn off the power
Press the POWER button.

To Display the Remaining Time

You can do this with the supplied remote commander only.

Press the DISPLAY button once, and the remaining time of the selection is displayed.

Selection number being played

Remaining time of the selection

Press the DISPLAY button once more, and the remaining time of the disc and the remaining selection numbers are displayed.

Remaining number of selections

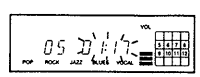
Total remaining time of disc

For normal display, press the DISPLAY button.

Information Display

The numbers, which appear during pause or between selections, indicate the following:

While in pause
The elapsed playing time flashes.



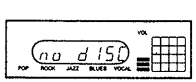
Between selections
The remaining time before the next selection is displayed.

Note

Since the CD system offers a wide dynamic range, high level peak inputs are recorded with high fidelity, and the noise level is very low. Do not turn up the volume while listening to a portion with very low inputs or no audio signals. If you do, the speakers may be damaged when a peak level portion is played.

Notes on information display

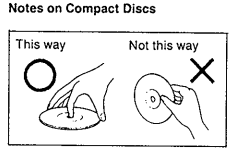
- To display the total number of the selections and the total playing time, press DISPLAY in the stop mode.
- If there is no disc in the disc tray, the following indication will appear in the display window several seconds after you press the CD button.



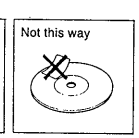
- Up to 16 selections can be displayed in the music calendar.
- If the disc has more than 17 selections, "OVER 16" appears in the display window.

- The remaining time of the selection from the 17th selection appears as "——:——".

Notes on Compact Discs



Handle the disc by its edge, and to keep the disc clean, do not touch the surface.



Do not stick paper or tape or write anything on the surface.

Before playing, clean the disc with a CD cleaner (not supplied).
Wipe the disc from the center out.
For maintenance of discs in detail, see page 46.

To Listen to the Desired Selections

To locate the beginning of a selection (AMS*)

Be sure any of the following indications is not displayed in the display window: REP 1, REP ALL, REP SHUF, SHUF, PGM, REP PGM. If one of these indications is displayed, press the □ (stop) button to clear the indication.

Unit

Press the ⏮ or ⏭ button during play or in pause.

To locate the beginning of the selection being played	To locate the beginning of the next selection
Press once.	Press once.

*AMS: Automatic Music Sensor

Remote commander

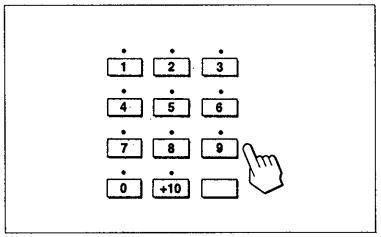
Press the ⏮◀◀ or ▶▶⏭ button during play or in pause.

To locate the beginning of the selection being played	To locate the beginning of the next selection
Press once.	Press once.

- **During play**
  When you press the ⏮ button once during play, the beginning of the current selection is located. When you press the ⏭ button once during play, the beginning of the next selection is located.
- **In pause**
  When you press the ⏮ button once in pause, the beginning of the selection in pause is located and the disc pauses. When you press the ⏭ button once in pause, the beginning of the next selection is located and the disc pauses.
- When you keep pressing the ⏮ or the ⏭ button for more than one second during play or pause, you can review or advance disc playing rapidly.

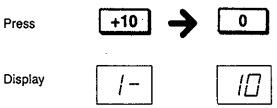
To select the desired selection directly

Press the number of the desired selection on the remote commander, and the play starts immediately.

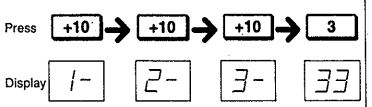


When a selection number is higher than 10, press the +10 button first, then the number buttons "1" to "0".

Example:
To play from the 10th selection



To play from the 33rd selection

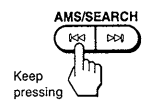
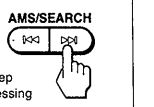


To Search for a Particular Point in a Selection (Search)

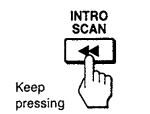
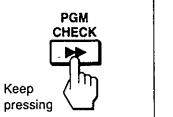
To review or to advance rapidly

Keep pressing the AMS/SEARCH (⏮/⏭) button on the unit or the ◀◀/▶▶ button on the remote commander to review or to advance disc playing rapidly.

Unit

To review disc playing rapidly	To advance disc playing rapidly
 Keep pressing	 Keep pressing

Remote commander

To review disc playing rapidly	To advance disc playing rapidly
 Keep pressing	 Keep pressing

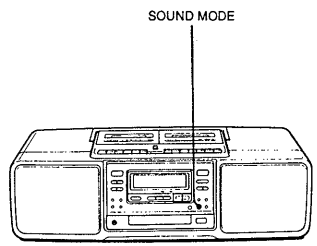
Release the AMS/SEARCH (⏮/⏭) button on the unit or the ◀◀/▶▶ button on the remote commander at the desired point, located by monitoring the high-speed sound.

In the pause mode, you can search rapidly by pressing the AMS/SEARCH (⏮/⏭) button on the unit or the ◀◀/▶▶ button on the remote commander. However, since you cannot hear the sound, observe the time counter instead to locate the desired point.

Adjusting Sound

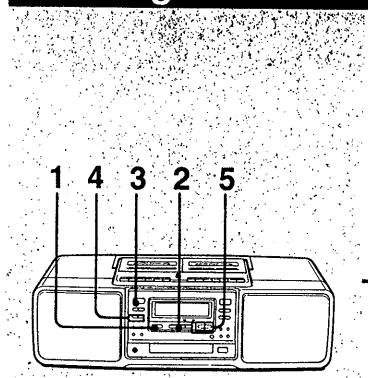
Five kinds of sound styles are stored in the unit. Press the SOUND MODE button, and you can enjoy the desired sound. Each time you press the button, the indication in the display window changes as follows: POP → ROCK → JAZZ → BLUES → VOCAL → normal mode (no indication) → POP → ···
Select your desired sound, observing the display window.

You can do this with the supplied remote commander.



POP	Gives light, bright sound, emphasizing high and middle range sounds.
ROCK	Gives powerful and clear sound, emphasizing low and high sound.
JAZZ	Gives heavy sound, emphasizing bass sound.
BLUES	Gives powerful and rich sound, emphasizing middle range sound and the bass sound a little higher than "JAZZ".
VOCAL	Provides more presence of vocals, emphasizing middle range sound.
normal	It is recommended to set to the normal mode to listen to selections with a dynamic range, such as classical music.

Listening to the Radio (You can do this with the supplied remote commander.)



1 Press POWER.

2 Press RADIO.

3 Select the desired band, FM or AM by pressing the BAND.

With each press of the button, the band changes.

Desired band	Band indication
FM	"FM"
AM	"AM"

4 Tune in the desired station.

Auto tuning
Keep pressing the TUNING/TIME SET button and release it when the digits in the display window begin to change. The digits automatically stop when the unit tunes in a station in good receiving condition.

5 Adjust the volume.

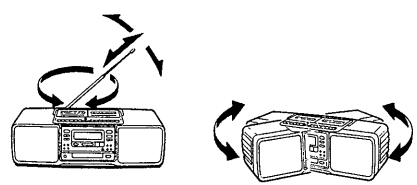
To turn off the radio
Press POWER again.

When the unit receives FM stereo programs
The ST (stereo) indication lights. When there is much noise while receiving FM stereo programs, display the "Mono" indication by pressing the MODE button. Though this eliminates the stereo effect, the noise will be reduced.

When you press the button once, the sound you are listening to (stereo or monaural) is displayed. To change the sound, press the button again while the "STEREO" or "Mono" (monaural) indication is displayed.

To improve the receiving condition

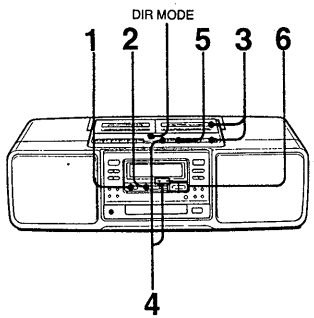
FM AM



Notes

- When you listen to an AM program near a TV, noise may be heard in the AM program. When you listen to an FM program near a TV with an indoor antenna, the picture of the TV may become unstable. In such cases, move the unit away from the TV.
- When you operate the supplied remote commander while listening to an AM program, noise may be heard.
- If a very weak station or a frequency without a station is tuned in during FM reception, the ST (stereo) indication may appear. This is not a malfunction. To listen to the sound, press the MODE button and display the "Mono" (monaural) indication.
- The sound may be interrupted momentarily when you switch the stereo/monaural mode during FM reception; however, this is not a malfunction.

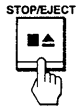
Playing Back Tapes (Either deck can be used. The procedure below shows deck B.)

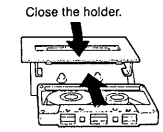


1 Press POWER.

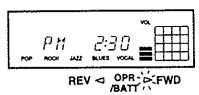
2 Press TAPE.

3 Insert a recorded tape.



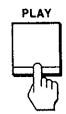


4 Check the tape transport direction with ◁REV/FWD▷ (reverse/forward) indicators CFD-260, deck B only).
If required, switch the tape transport direction by pressing the ◀I▶ button.

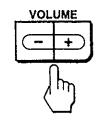


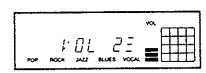
The REV or FWD indicator lights, depending on the direction of the tape.

5 Press PLAY.



6 Adjust the volume.





To stop playback
Press the ■⏏ button.

To pause for a moment
Press the ❚❚ button.
(To resume play after pause, press the ❚❚ button.)

To remove a cassette
Press the ■⏏ button.

To turn off the power
Press the POWER button.

To wind a cassette rapidly in the forward or reverse direction, press the following buttons:

	Wind rapidly in forward direction	Wind rapidly in reverse direction
Upper side	▶▶	◀◀
Reverse side (CFD-260 only)	◀◀	▶▶

During the rapid playback or rewinding, the REV or FWD lamp lights.

To select direction mode (CFD-260 deck B only)
Set the DIR MODE selector to the desired position.

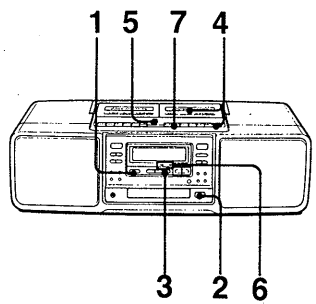
	Direction mode
To play back one side of a cassette	⇄
To play back both sides of a cassette from the upper side to the reverse side of a cassette*	↻

*If playback begins from the reverse side, the tape stops at the end of that side.

To listen to the opposite side during playback (CFD-260 deck B only)
Press the ◀I▶ button.

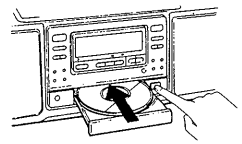
To locate the desired position (CFD-260 deck B only)
Keep pressing the ◀◀ or ▶▶ button (CUE/REVIEW function) during play. At the desired point found by listening to the high speed sound, release the ◀◀ or ▶▶ button to resume play.

Recording CD Sound (with deck B)

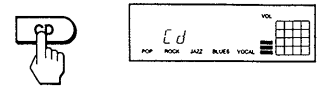


1 **Press POWER.**

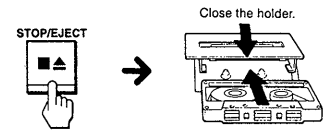
2 **Insert a disc in the disc tray (see page 13).**



3 **Press CD.**

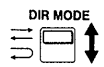


4 **Insert a cassette in deck B with the side to be recorded up.**



Use a TYPE I (normal) tape only.

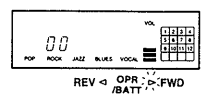
5 **Select the direction mode with DIR MODE (CFD-260 only).**



	Direction mode
To record on both sides of a cassette*	⇄
To record on one side of a cassette	⇄

*Both-side-recording should be started from the forward side.

6 **Check the tape transport direction (CFD-260 only).**
If required, switch directions by pressing the ◀I▶ button.



7 **Press ● REC on deck B.**
PLAY is depressed automatically.
The REC and DUB indications appear and recording starts from the beginning of the disc (CD synchronized starting system).

To stop recording
Press the □ (stop) button on the CD player section and the ■⏏ button on deck B.

To turn off the unit
Press the POWER button.

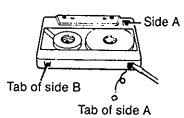
The recording level is adjusted automatically.
The setting of the VOLUME buttons or the SOUND MODE button does not affect the recording level. During recording you can listen to the sound, adjust the volume of the speakers or headphones, or change the sound mode.

Checking the remaining time of the disc
Press the DISPLAY button on the remote commander.

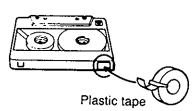
Press DISPLAY...	You see...
once	the remaining time of the selection being played.
twice	the remaining time of the disc and the number of remaining selections

To erase the recorded sounds
1 Press the TAPE button to display the "TAPE" indication.
2 Disconnect the microphone if connected to the MIX MIC jack.
3 Press the ● button.

To prevent accidental erasure
Break off the cassette tab of side A or B as illustrated.

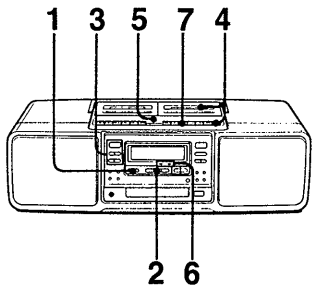


To reuse a cassette for recording, cover the broken tab slot.



Note on recording
During recording, only the □ (stop) and the OPEN/CLOSE button for CD and the ■⏏ button for tape on the unit can be operated, and only the ■ (stop) and the ⏏ buttons on the remote commander can be operated.

Recording Radio Sound (with deck B)

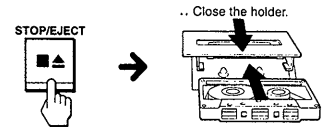


1 Press POWER.

2 Press RADIO.

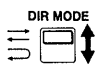
3 Tune in the desired station (see page 16).

4 Insert a blank cassette in deck B.



Use a TYPE I (normal) tape only.

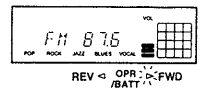
5 Select the direction mode with DIR MODE (CFD-260 only).



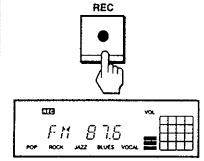
	Direction mode
To record on both sides of a cassette*	⇄
To record on one side of a cassette	⇉

*Both-side-recording should be started from the forward side.

6 Check the tape transport direction (CFD-260 only)
If required, switch directions by pressing the ◀I▶ button.



7 Press ● REC on deck B.
PLAY is depressed automatically. The REC indication appears and recording starts.



To stop recording
Press the ■⏏ button.

To turn off the unit
Press the POWER button.

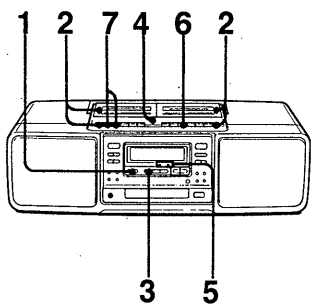
The recording level is adjusted automatically.
The sound to be recorded is not affected by the setting of the VOLUME buttons or the SOUND MODE button.

To reduce noise while recording AM
If a whistling noise is heard, set the ISS switch* (on the rear of the unit) to the position where the noise is reduced best. Normally set it to "2".

*ISS: Interference Suppress Switch

Notes
- If you use the supplied remote commander near the unit while listening to an AM program, noise might be heard.
- When you record radio sound, operating the unit on house current with the supplied power cord is recommended.

Tape Dubbing (from deck A to deck B)



1 **Press POWER.**

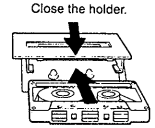
2 **Insert a recorded cassette in deck A.**

Close the holder.

The upper side is to be played back.

Insert a blank cassette in deck B.

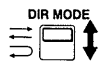
Close the holder.



The upper side is to be recorded.
Use a TYPE I (normal) tape.

3 **Press TAPE twice to display the DUB indication.**

4 **Select the direction mode with the DIR MODE (CFD-260 only).**

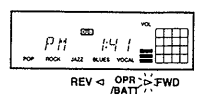


	Direction mode
To record on both sides of a cassette*	⇄
To record on one side of a cassette	⇉

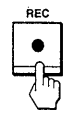
*Both-side-recording should be started from the forward side.

5 **Check the tape transport direction (CFD-260 only).**

If required, switch directions by pressing the ◀I▶ button.



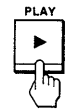
6 **Press ● REC on deck B.**



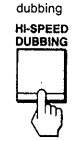
PLAY is depressed automatically. The REC indication appears and the unit will standby.

7 **Press ▶ PLAY or HI-SPEED DUBBING on deck A.**

For normal dubbing



For high-speed dubbing



To stop dubbing
Press the ■⏏ button on deck A then deck B.

To turn off the unit
Press the POWER button.

The recording level is adjusted automatically
The sound to be recorded is not affected by the setting of the VOLUME buttons or the SOUND MODE button.

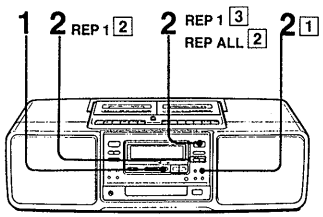
Notes

- If deck A's tape finishes first, the ▶ button will automatically be released and deck B will also stop. The ● and the ▶ buttons are still depressed. To release them, press the ■⏏ button.
- If deck B's tape finishes first, the ● and ▶ button of deck B will automatically be released. Deck A will continue to play.

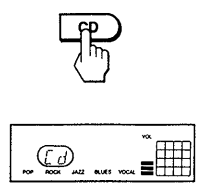
Various Disc Playing Modes

Each time you press the MODE button, the playing mode changes in sequence as indicated in the display window:
REP (repeat) 1 → REP (repeat) ALL → REP SHUF (repeat shuffle play) → SHUF (shuffle play) → PGM (program play) → REP PGM (repeat program play) → normal play. Select the desired mode by observing the display window.

To Repeat Selections — Repeat Play

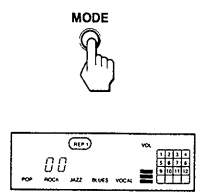


1 **Press CD to display the "Cd" indication.**

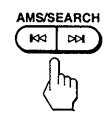


2 **Repeat 1**

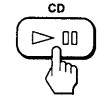
1 Press MODE to display the REP 1 indication.



2 Choose the desired selection with the ⏮ or ⏭ button (or the number buttons on the remote commander).



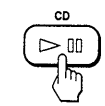
3 Press ▷II.



Repeat All

1 Press MODE to display the REP ALL indication.

2 Press ▷II.



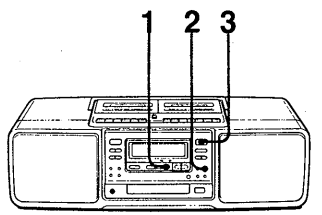
Note
Make sure neither the PGM nor SHUF indication is displayed before proceeding with these steps. If either is displayed, press the □ (stop) button.

To stop repeat play
Press the □ (stop) button.

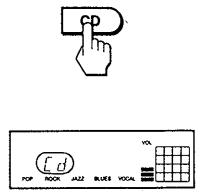
To release repeat play and to return to normal play
Press the MODE button until no indication appears or press the □ button while the CD player is in stop mode.

Note
During repeat play, the remaining time of the disc cannot be displayed.

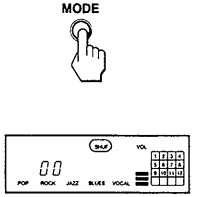
To Play Selections in a Random Order — Shuffle Play



1 **Press CD to display the "Cd" indication.**



2 **Press MODE until the SHUF indication appears.**



3 **Press ▷II.**

When a selection finishes playing, its number disappears from the music calendar.

To stop shuffle play
Press the □ (stop) button.
When all the shuffle play is finished, the player stops.

To release shuffle play and to return to normal play
Press the MODE button until no indication appears or press the □ button while the CD player is in stop mode.

When you press the MODE button during normal play
Shuffle play begins from the selection being played.

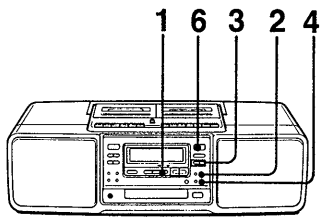
To repeat selections in a random order — Shuffle repeat
1 Press the CD button to display the "Cd" indication.
2 Press the MODE button until the REP SHUF indication appears.
3 Press the ▷II button.

Note
You cannot display the remaining time of the disc during shuffle play.

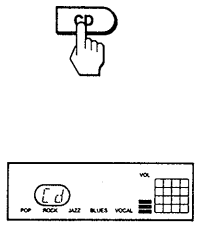
What does [ ] mean?
This indication means the unit is shuffling the selections.

To Play Selections in the Desired Order — Program Play

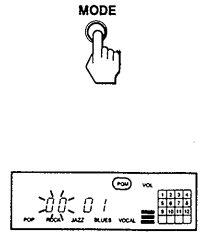
Unit



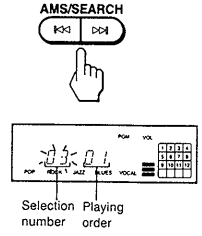
1 Press CD to display the "Cd" indication.



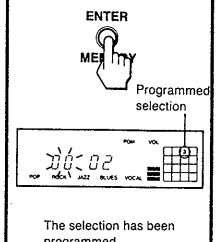
2 Press MODE until the PGM indication appears.



3 Select the desired selection by pressing AMS/SEARCH ⏮/⏭.



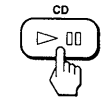
4 Press ENTER/ MEMORY.



The selection has been programmed.

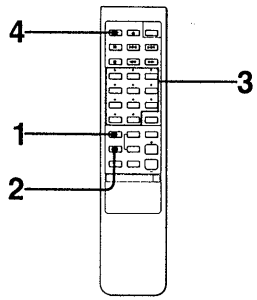
5 Repeat steps 3 and 4.
Select selections in the order you want to play them.
Up to 17 selections can be programmed.

6 Press ▷II.



The selection programmed first begins to play.
The numbers of the finished selections disappear from the music calendar.

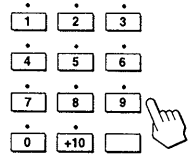
Remote commander



1 Press CD to display the "Cd" indication.

2 Press MODE until the PGM indication appears.

3 Press the number buttons in the desired order.
The selections are programmed in the order the numbers are pressed.



Up to 17 selections can be programmed.

4 Press ▶.

The selection programmed first begins to play.
The numbers of the finished selections disappear from the music calendar.

To stop the program play
Press the □ or ■ (stop) button.

To reprogram the selections from the beginning
1 Before play starts, press the □ or ■ (stop) button once.
During play, press the □ or ■ (stop) button twice.
2 Repeat the steps from the beginning.

To reprogram the selections while programming (only before play starts)
Press the EDIT/CLEAR button twice, and the selection programmed last disappears from the music calendar. With each press, the programmed selections disappear one by one.
When all the selections disappear from the music calendar, reprogram selections.

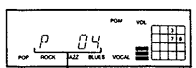
To release program play and to return to normal play
Press the MODE button until no indication appears.

When the programmed selections have finished
The selection numbers in the music calendar disappear one by one, but when the last selection has finished, the programmed selections are displayed again.
By pressing the ▷II button, you can repeat the same program play as many times as you wish.

To program a pause

Unit

1 Press the I◁◁ or the ▷▷I button until the "P" indication appears in the display window.
2 Press the ENTER/MEMORY button.
A pause counts as one selection.



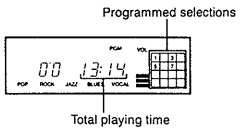
A pause has been programmed as the 4th selection.

Remote commander

Press the II button where you want to program a pause. The player pauses when it comes to the position where a pause is programmed. To resume playing, press the ▷II button on the unit or the II button on the remote commander.

To check programmed selections (only before program play)
During programming, press the ENTER/MEMORY button on the unit or the PGM CHECK (▶▶) button on the remote commander. With each press, the selections appear in the programmed order.

To check the total playing time of the programmed selections (only before program play)
Press the DISPLAY button on the remote commander.
The total playing time appears instead of the playing order.



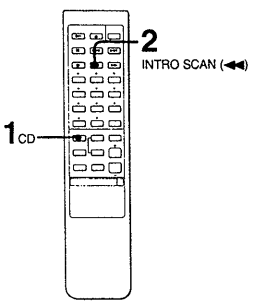
When you program a pause in the programmed selections, the playing time after the pause appears. To return to the normal display, press the DISPLAY button.

To erase the programmed selections
The programmed selections are erased in the following cases.
- When you press the □ (stop) button twice during the program play.
- When you press the □ (stop) button in the stop mode.
- When you open the disc tray.

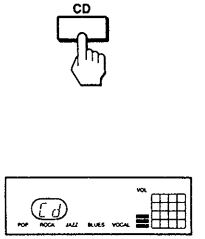
To repeat the desired selections in the desired order — Program Repeat
1 Press the CD button to display the "Cd" indication.
2 Press the MODE button until the REP PGM indication appears.
3 Program the desired selections. (see page 28).
4 Press the ▷II button.
The same program is played repeatedly.

To Scan the Beginning of the Selections — INTRO SCAN

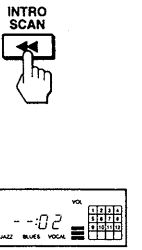
You can scan the first 10 seconds of all selections during normal play, shuffle play, and program play.



1 Press CD to display the "Cd" indication.



2 Press INTRO SCAN while the CD player is in stop mode.
Intro scan play starts immediately.

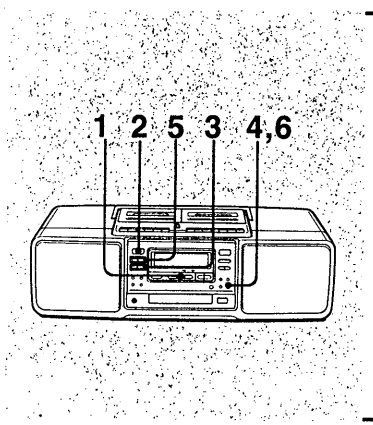


To release the intro scan play
Press any button for disc play.

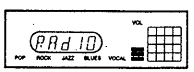
Note
Even if a pause is programmed in program play, the intro scan play skips the pause.

Presetting Radio Stations

Once you preset the stations, you can listen to the desired station just by pressing the PRESET button on the unit or the number buttons on the remote commander.
You can preset up to 24 stations, 12 for each AM and FM band.

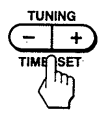


1 Press RADIO to display the "RAdIO" indication.



2 Select the desired band, FM or AM by pressing BAND.

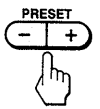
3 Tune in the desired station.



4 Press ENTER/ MEMORY for about 2 seconds.

A preset number flashes in the music calendar.

5 Select the desired preset number by pressing PRESET.

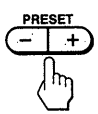


6 Press ENTER/ MEMORY.

FM 87.6 has been stored on preset number 3.

To tune in the preset station

Unit
Select the band, then select the desired number by pressing "–" or "+" of the PRESET button.



Remote commander
Select the band, then press the number button of the desired preset number.

When you want to tune in the station:

With the preset number...	Press...
1 to 9	1 to 9
10	+10 → 0
11	+10 → 1
12	+10 → 2

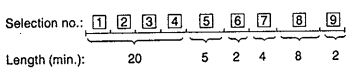
Notes on storing stations
- When you enter a new station on a preset number, the previous station will be erased automatically.
  The only way to erase a station from the memory is to store a new one in its place.
- The preset stations are erased when you remove the AC power cord or the batteries for the unit.
  We recommend to insert four size AA (R6) batteries (not supplied) for clock/timer/memory before you use the unit.

Automatic Editing of the CD for Recording by Specifying the Tape Length – AUTO EDIT

The unit automatically edits the selections on a disc according to the tape length.

There are three ways of editing.
Each time you press the EDIT/PGM CLEAR button, the editing mode changes in sequence as indicated in the display window: EDIT 1 → EDIT 2 → EDIT 3 → normal recording.

Example: To record the disc below on a 46-minute tape (23 minutes for each side)



EDIT 1:
The unit edits selections without changing the original order. When the total playing time for one side exceeds the specified tape length, the remaining selections are recorded on the reverse side of the tape.
- In the example above, the playing time of the first 4 selections adds up to 20 minutes leaving only 3 minutes. As the 5th selection is 5 minutes long, the 5th and the succeeding selections are recorded on the reverse side of the tape.

  Upper side: the total playing time is 20 minutes.
  Reverse side: the total playing time is 21 minutes.

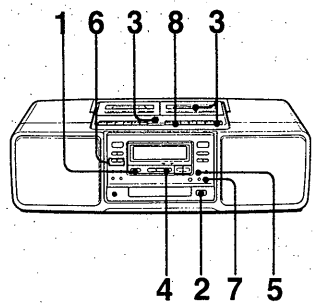
EDIT 2:
The unit edits selections to best fit the tape length. As a result, the selection order may be changed.
- In the example above, the unit adds up the first 4 selections. Then, with 3 minutes left, it looks for a selection that fits into the remaining time and so selects the 6th.

  Upper side: the total playing time is 22 minutes.
  Reverse side: the total playing time is 19 minutes.

In EDIT 1 and EDIT 2, the recording length you can specify is up to 99 minutes. Up to 16 selections can be edited.

EDIT 3:
The unit records all the selections to the tape. When one side of the tape ends with the last selection unfinished, the unit records from the beginning of the unfinished selection on the reverse side.

Notes
- Use a tape which is longer than the total playing time of the disc.
- When you press the EDIT/PGM CLEAR button, the selection order stored for program play (see page 28) is erased.
- To record the selections which cannot be recorded on the specified tape after the selection has been programmed for automatic editing, press the MODE button twice to display the PGM indication first and then record.
- When you open the disc tray, the selection order programmed for automatic editing is erased.



1 Press POWER.

2 Insert the disc in the unit (see page 13).

3 Insert a blank cassette into deck B. Select "⇄" with DIR MODE (CFD-260 only).

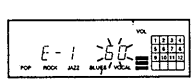
Use a TYPE I (normal) tape only.

4 Press CD to display the "Cd" indication.

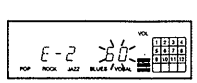
- Make sure the disc is not moving. During play, the edit function does not work.
- When the SHUF or the PGM indication is displayed in the display window, press the □ (stop) button once until the indication disappears.

5 Select EDIT 1, EDIT 2 or EDIT 3 by pressing EDIT/PGM CLEAR.

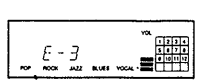
EDIT 1:



EDIT 2:

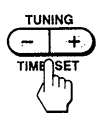


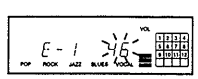
EDIT 3:



Proceed to step 8.

6 Enter the total tape length by pressing TUNING/TIME SET (−/+).



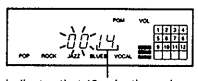


(continued on next page.)

Automatic Editing of the CD for Recording by Specifying the Tape Length – AUTO EDIT (continued)

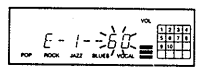
7 **Press ENTER/MEMORY.**

When the total playing time is shorter than the tape length:



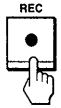
This indicates that 12 selections plus a pause have been programmed. (Additional selections can be programmed from the 14th step.) The PGM indication is displayed to indicate that programming has been completed.

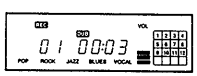
When the total playing time is longer than the specified tape length:



The tape length flashes and "– – " is displayed. Replace the tape with a longer one, and repeat from step 6.

8 **Press ● REC.**
PLAY is depressed automatically.
The REC and DUB indications appear in the display window and recording starts.





To check the programmed selections (EDIT 1 and EDIT 2 only)
Press the PGM CHECK (▶▶) button on the remote commander while the disc is not moving. You can check the selections from the beginning one by one. After pressing the DISPLAY button, press the PGM CHECK (▶▶) button on the remote commander, and the time added up on each side will be displayed.

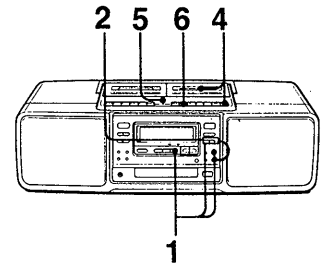
When recording on the upper side is finished

On the CFD-250
The CD player is set to the pause mode and the tape runs to the end of the upper side (any previous recordings will be erased). Operate as follows:
1 Take out the cassette and reverse the recording side.
2 Reinsert the cassette and press the ● button on the cassette deck.
The CD player starts to play and the cassette deck starts to record on the reverse side.

On the CFD-260
The CD player is set to the pause mode. The cassette deck starts to erase the remaining tape on the upper side, and then, the tape changes to the reverse side.
The CD player automatically starts to play and the cassette deck starts to record on the reverse side.

When all the selections have been recorded
Both the CD player and the cassette deck stop.

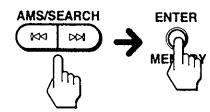
Recording Programmed Selections (Manual Program Edit)



1 **Program selections to record on the upper side (see page 28).**

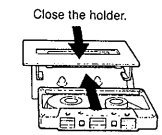
If you want to record on both sides, go on to step 2.
If you want to record on just the upper side, go on to step 5.

2 **Program a pause by pressing AMS/SEARCH and ENTER/MEMORY.**



3 **Program selections to record on the reverse side.**

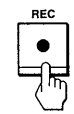
4 **Insert a cassette into deck B.**



Use a TYPE I (normal) tape.

5 **CFD-260 only**
To record on both sides, set DIR MODE to ⇄.
To record on one side, set DIR MODE to ⇄.

6 **Press ● REC.**
PLAY is depressed automatically.
The REC an DUB indications appear in the display window and recording starts.



When recording on the upper side finished

On the CFD-250
After the cassette deck stops, reverse the tape and press the ● button on the cassette deck.

On the CFD-260
The tape reverses automatically and recording starts on the reverse side.

To program selections with the total playing time displayed
Press the DISPLAY button to display "––:––" indication during programming selections. The total playing time of programmed selections is displayed.

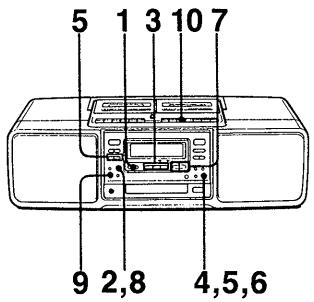
Note
When you record CD or tape sound, operating the unit on house current with the supplied power cord is recommended.

Using the Built-in Timer

Four size AA (R6) batteries (not supplied) should be inserted.

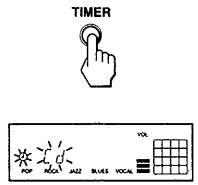
To Listen to the Desired Sound at the Desired Time

You can wake up to the desired sound at the desired time when you set the timer-on time. Make sure the current time is correct. If it is not, correct it referring to page 11. Make sure the ⏲ indication is not displayed in the display window.

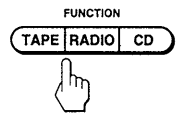


1 Press POWER.

2 Press TIMER, and the ⏲ and function indications flash.



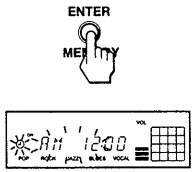
3 Select and prepare the desired sound source.



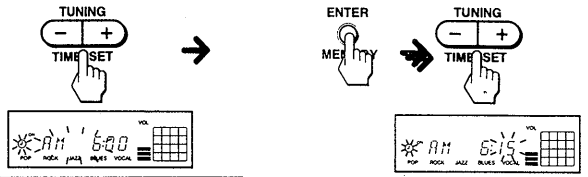
	Indication	Preparation
To listen to a disc*	"Cd"	Place a disc on the disc tray.
To listen to the radio	"RAdIO"	Tune in the desired station.
To listen to a tape (CFD-260 only)	"TAPE"	Insert a tape into deck B.

*You can listen to a disc in a playing mode other than the normal playing mode.

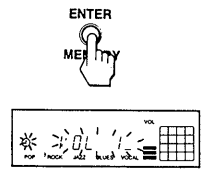
4 Press ENTER/MEMORY.



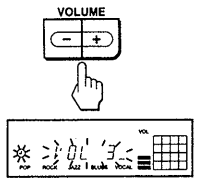
5 Set the timer-on time by pressing TUNING/TIME SET and ENTER/MEMORY.
Example: to set to 6:15 a.m.



6 Press ENTER/MEMORY.



7 Set the desired volume by pressing VOLUME.

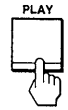


You can choose the volume from 10 gradations.

8 Press TIMER.
What you programmed has been stored.

9 Press STANDBY.
The ⏲ indication is displayed and the power is turned off automatically.

10 Press PLAY on deck B when you listen to a tape.



At the preset time...
At the timer-on time, the power is turned on and the sound comes on automatically.
120 minutes after the timer-on time, the power will be turned off automatically.

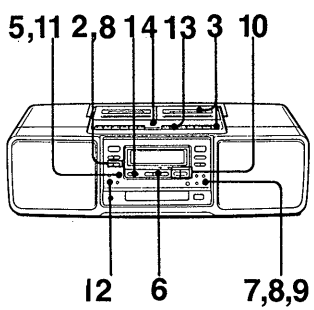
To confirm the timer-on time, the function and the volume
Press the TIMER button, then the ENTER/MEMORY button. Each time you press the ENTER/MEMORY button, what you stored appears. After you have confirmed, press the TIMER button again.

To stop the play in the middle
TAPE: press the ■⏏ button, then the POWER button.
RADIO: press the POWER button.
CD: press the □ (stop) button, then the POWER button.
To release the timer-on time
Press the STANDBY button to make the ⏲ indication disappear from the display window.

To listen to the desired sound at the same time on the next day
You need not set the timer and the function again, because the preset time and the function are stored until you reset them. When the ⏲ indication is not displayed in the display window, press the STANDBY button again.

To Record Radio Programs at the Desired Time (CFD-260 deck B only)

Make sure the current time of the unit is correct. If it is not, correct it referring to page 11.
Make sure the ⏲ indicaton is not displayed in the display window.

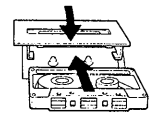


1 Press POWER.

2 Select RADIO and tune in the desired station.

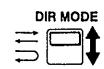
3 Insert a blank cassette into deck B.

Close the holder.



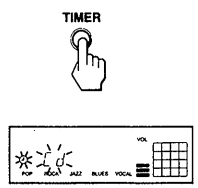
Use a TYPE I (normal) tape only.

4 Select the desired tape direction mode with DIR MODE.



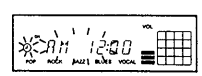
	Indication
To record on both sides of a cassette	⇄
To record on one side of a casstte	⇄

5 Press TIMER, and the ⏲ and function indications flash.



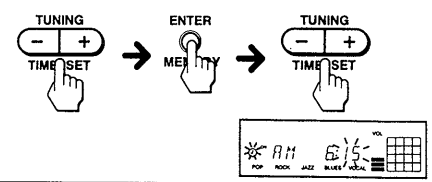
6 Press RADIO.

7 Press ENTER/MEMORY.

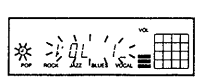


8 Set the timer-on time by pressing TUNING/TIME SET and ENTER/MEMORY.

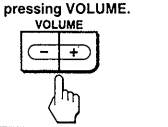
Example: to set to 6:15 a.m.



9 Press ENTER/MEMORY.



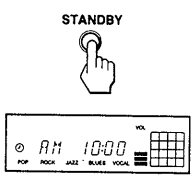
10 Set the desired volume by pressing VOLUME.



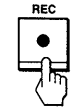
You can choose the volume from 10 gradations.

11 Press TIMER.
What you programmed has been stored.

12 Press STANDBY.
The ⏲ indication is displayed and the power is turned off automatically.



13 Press ● REC.



At the preset time
At the timer-on time, the power is turned on and the sound comes on automatically.
120 minutes after the timer-on time, the power is turned off automatically.

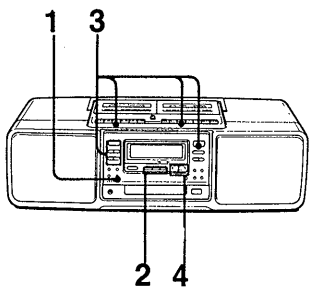
To confirm the timer-on time, the function and the volume
Press the TIMER button, then the ENTER/MEMORY button. Each time you press the ENTER/MEMORY button, what you stored appears. After you have confirmed, press the TIMER button again. Then the display which had been displayed before you pressed the button reappears.

To stop recording in the middle
Press the ■⏏ button, then the POWER button.

To release the timer-on time
Press the STANDBY button to make the ⏲ indication disappear from the display window.

Note
For recording, using the unit on house current with the supplied AC power cord is recommended.

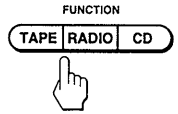
To Fall Asleep with the Desired Sound — Sleep Function



1 **Press SLEEP.**
The SLEEP indication and the indication before you turned off the unit appear in the display window.

If the power is off, it will be turned on automatically.

2 **Select the desired sound source by pressing the function button.**



3 **Play the desired sound source**

TAPE: Press PLAY.
RADIO: ① Select the desired band
② Tune in the desired station.
CD: Press the ▷II button.

The sleep function starts.

4 **Adjust the volume.**
120 minutes after you press the SLEEP button, the power is turned off automatically. You can fall asleep listening to the desired program.

To stop the sleep function in the middle of the setting
Press the SLEEP button again or the POWER button.

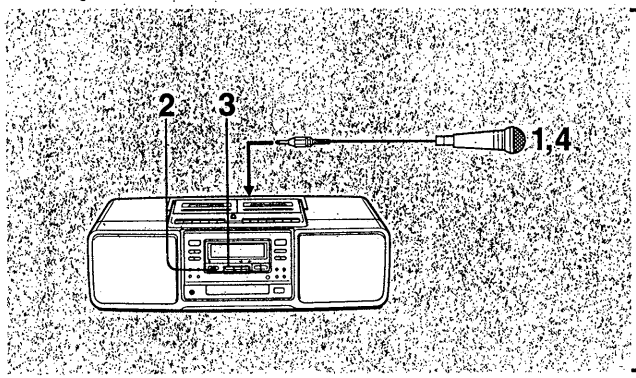
To reset the sleep time
Turn off the power, and repeat from step 1.

To fall asleep with the desired program and to be awakened with another program
1 Preset the desired program to wake up to.
Follow the procedures on page 38, 39.
2 Activate the sleep function.
Follow the procedures above.

As you can set different volume when you set the sleep function and the timer-on time, you can fall asleep at low volume and be awakened at high volume.

Microphone Mixing

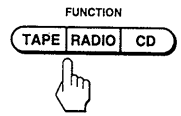
You can sing with "Karaoke" or add narration.



1 Connect a microphone to the MIX MIC jack.
Use a monaural microphone with mini-plug (not supplied).
If the microphone has a power switch, set it to ON.

2 Press POWER.

3 Select and play the desired sound source.



	Displayed indication
To mix with tape sound	"TAPE"
To mix with the radio	"RAdIO"
To mix with disc sound	"Cd"

4 Sing or speak into the microphone.

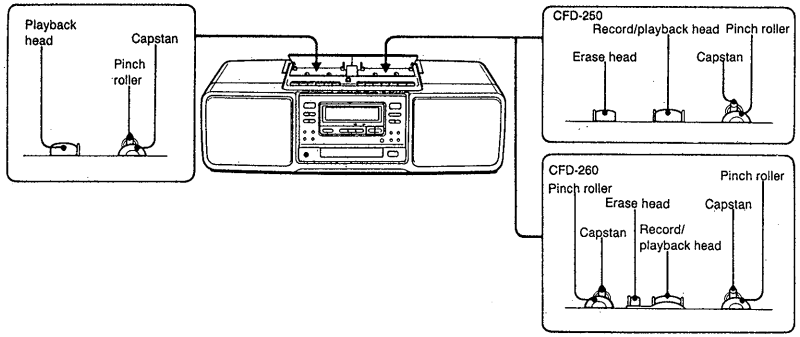
To record mixed sounds
Insert a cassette into deck B and set it in the recording mode.

To record mixed sound with tape
1 Insert a recorded cassette into deck A and a blank cassette into deck B.
2 Press the TAPE button to display the "TAPE" indication.
3 Press the ● button on deck B.

.Public address system
1 Connect a microphone to the MIX MIC jack.
When the microphone has a power switch, set it to ON.
2 Press the POWER button.
3 Press the TAPE button to display the "TAPE" indication.
4 Adjust the volume.
When the unit is set in the recording mode, only the sound from the microphone is recorded.

Notes
- When howling (acoustic feedback) occurs, move the microphone away from the speakers.
- Microphone sounds cannot be mixed in the high-speed dubbing mode.
- It is not recommended to use a microphone equipped with an echo function.

Maintenance



Cleaning the heads and tape path
Contaminated heads cause insufficient recording or sound drop-out in playback.
We recommend cleaning after every 10 hours of operation. To make the best possible recording, however, you should clean all surface over which tape travels before making each recording.

Wipe the heads, the pinch rollers and the capstans with a cleaning tip slightly moistened with cleaning fluid or alcohol.

After cleaning the heads, rollers and the tape path, insert a cassette when the areas cleaned are completely dry

Demagnetizing head
After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequencies and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available head demagnetizer.

Cleaning the cabinet
Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent, such as alcohol or benzine.

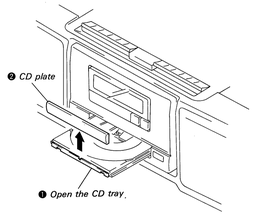
Notes on Compact Discs
- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.
- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature inside the car.
- After playing, store the disc in its case.

If there is a scratch, dirt or fingerprints on a disc, it may cause tracking error.

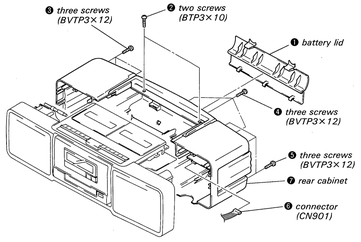
SECTION 3
DISASSEMBLY

NOTE: Follow the disassembly procedure in the numerical order given.

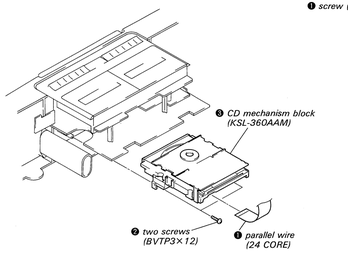
CD PLATE REMOVAL



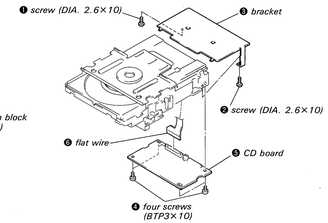
REAR CABINET REMOVAL



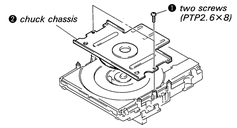
CD MECHANISM BLOCK REMOVAL



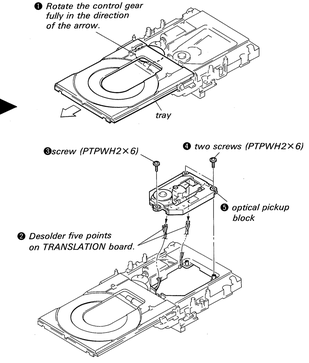
CD BOARD REMOVAL



CHUCK CHASSIS REMOVAL

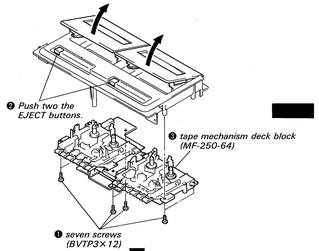


OPTICAL PICKUP BLOCK REMOVAL


❶ Rotate the control gear fully in the direction of the arrow.
tray
❸screw (PTPWH2×6)
❹ two screws (PTPWH2×6)
❺ optical pickup block
❷ Desolder five points on TRANSLATION board.

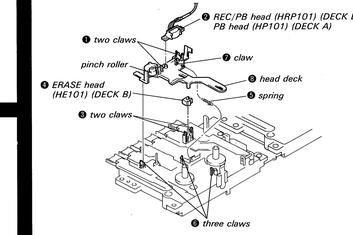
TAPE MECHANISM DECK BLOCK REMOVAL

CFD-250

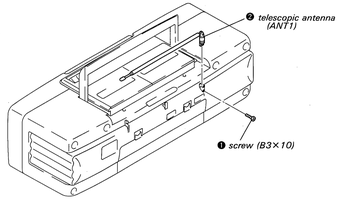


HEAD DECK AND HEAD REMOVAL

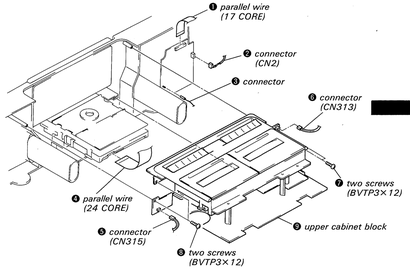
CFD-260



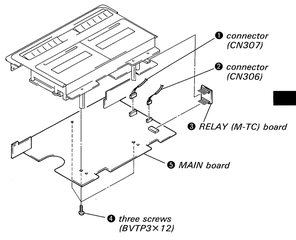
TELESCOPIC ANTENNA REMOVAL



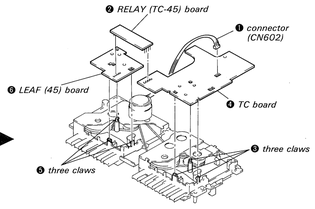
UPPER CABINET REMOVAL



MAIN BOARD REMOVAL

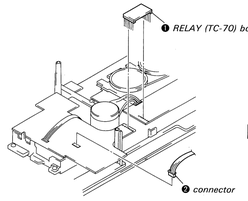


TC, LEAF (45) AND RELAY (TC-45) BOARDS REMOVAL



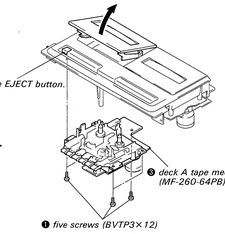
CFD-260

RELAY (TC-70) BOARD REMOVAL

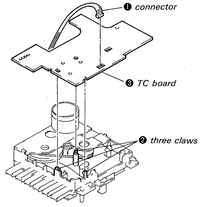


DECK A

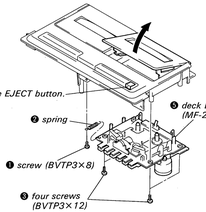
DECK A TAPE MECHANISM BLOCK REMOVAL



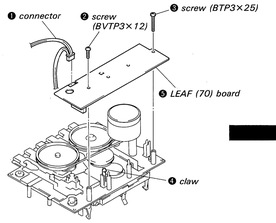
TC BOARD REMOVAL



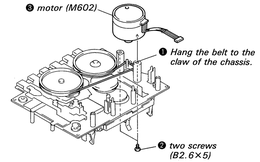
DECK B TAPE MECHANISM BLOCK REMOVAL



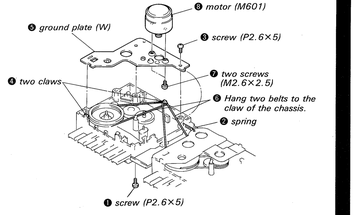
LEAF (70) BOARD REMOVAL



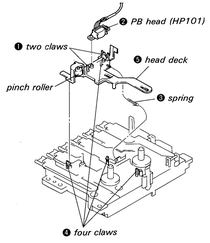
MOTOR REMOVAL



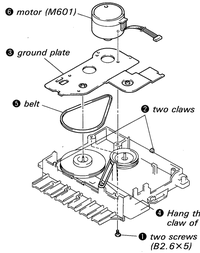
MOTOR REMOVAL


❽ motor (M601)
❺ ground plate (W)
❸ screw (P2.6×5)
❹ two claws
❼ two screws (M2.6×2.5)
❻ Hang two belts to the claw of the chassis.
❾ spring
❶ screw (P2.6×5)

HEAD DECK AND HEAD REMOVAL

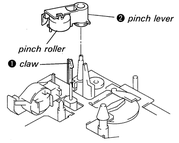


MOTOR REMOVAL

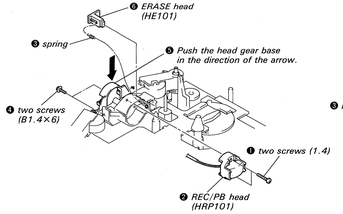


DECK B

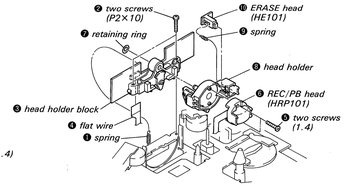
PINCH LEVER REMOVAL



HEAD REMOVAL
[FORMER TYPE]


❻ ERASE head (HE101)
❸ spring
❺ Push the head gear base in the direction of the arrow.
❹ two screws (B1.4×6)
❶ two screws (1.4)
❷ REC/PB head (HRP101)

HEAD REMOVAL
[NEW TYPE]



SECTION 4
MECHANICAL ADJUSTMENT

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab :
   record/playback head　　pinch roller
   erase head　　rubber belts
   capstan　　idlers
2. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be perfomed with the rated power supply voltage unless otherwise noted.
6. Power supply voltage : 9V dc.

Torque Measurement

CFD-250

Torque	Torque meter	Meter reading
Forward	CQ-102C	20—60g · cm (0.28—0.83 oz · inch)
Forward back tension	CQ-102C	2—6g · cm (0.028—0.083 oz · inch)
Fast Forward	CQ-201B	more than 45g · cm (more than 0.62 oz · inch)
Rewind	CQ-201B	more than 45g · cm (more than 0.62 oz · inch)

CFD-260

Torque		Torque meter	Meter reading
Forward	DECK A	CQ-102C	20—60g · cm (0.28—0.83 oz · inch)
	DECK B		25—60g · cm (0.34—0.83 oz · inch)
Forward back tension	DECK A	CQ-102C	2—6g · cm (0.028—0.083 oz · inch)
	DECK B		2—5g · cm (0.028—0.069 oz · inch)
Reverse	DECK B	CQ-102RC	25—60g · cm (0.34—0.83 oz · inch)
Reverse back tension	DECK B	CQ-102RC	2—5g · cm (0.028—0.069 oz · inch)
Fast Forward	DECK A	CQ-201B	more than 45g · cm (more than 0.62 oz · inch)
	DECK B		more than 55g · cm (more than 0.76 oz · inch)
Rewind	DECK A	CQ-201B	more than 45g · cm (more than 0.62 oz · inch)
	DECK B		more than 55g · cm (more than 0.76 oz · inch)

Tape Tension Measurement

CFD-250

Mode	Meter	Meter reading
Forward	CQ-403A	more than 70g (more than 2.47 oz)

CFD-260

Mode		Meter	Meter reading
Forward	DECK A	CQ-403A	more than 70g (more than 2.47 oz)
	DECK B		more than 100g (more than 3.52 oz)
Reverse	DECK B	CQ-403R	more than 100g (more than 3.52 oz)

SECTION 5
ELECTRICAL ADJUSTMENT

TAPE RECORDER SECTION

PRECAUTION

1. Adjustments should be performed in the order given.
   Generally playback circuit adjusments should be completed before performing recording circuit adjustments.
2. Adjustments should be performed for both L-ch and R-ch.
   Switches and controls should be set as follows unless otherwise specified.

- **Positions of switches and control knobs**
  FUNCTION ····· TAPE
  DIR MODE ····· ⇆
  VOLUME ····· standard output level position

- **Standard input level**

Input Pin	MIX MIC
Signal source impedance	300 Ω
Input signal level	2.45 mV (− 50 dB)
Frequency	1 kHz

- **Standard output level**

Output Pin	PHONES
Signal source impedance	32Ω
Output signal level	0.25 V (− 10 dB)

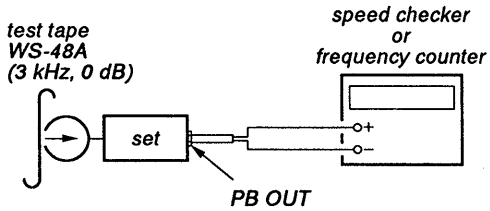
0 dB=0.775 V

- **Test tape**

Test Tape	Signal	Used for
WS-48A	3 kHz, 0 dB	Tape speed adjustment

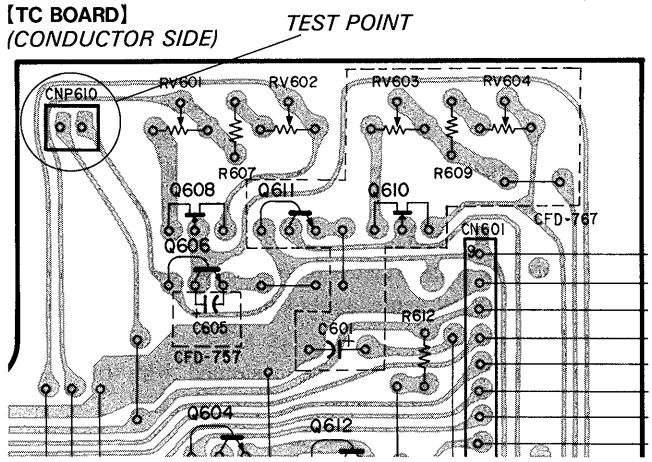
Tape Speed Adjustment DECK A DECK B

Procedure:
Mode: FWD playback



Perform high speed adjsutment before normal speed adjustment.
Playback the test tape WS-48A and adjust to meet the specifications below.

[TC BOARD]
(CONDUCTOR SIDE)

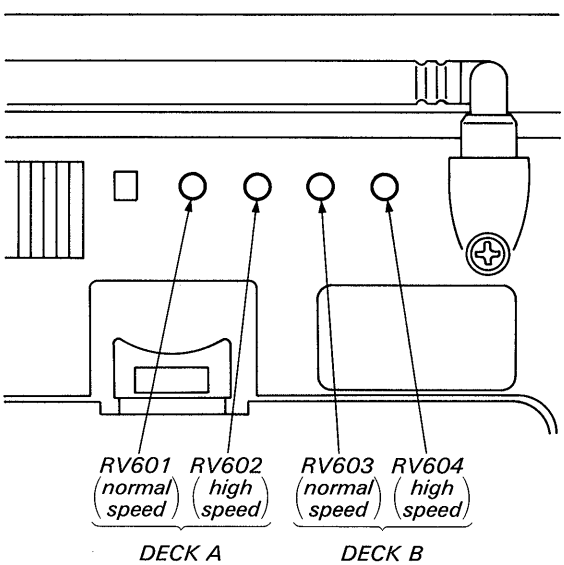


(CFD-260)

Adjustment Value:

Speed	deck	Adjust-ment part	test pin CNP610	speed checker reading	frequency counter reading
high	A	RV602	short	−0.33~0.33%	5,980~ 6,020 Hz
	B	RV604			
normal	A	RV601	open	−0.33~0.33%	2,990~ 3,010 Hz
	B	RV603			

Adjustment Location:

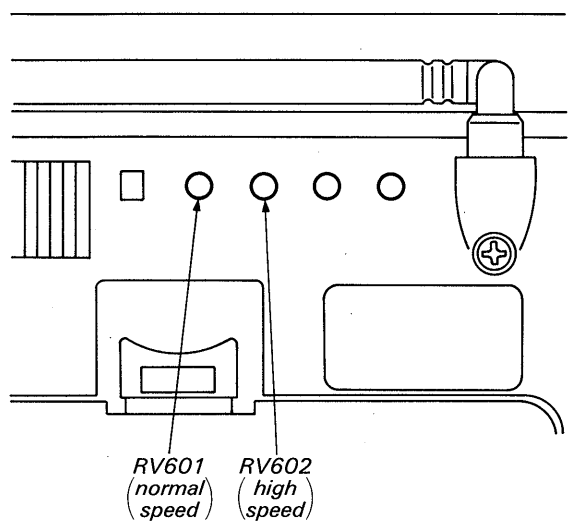


(CFD-250)

Adjustment Value:

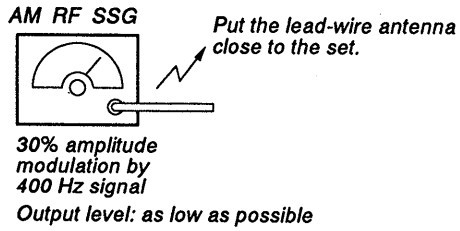
Speed	Adjust-ment part	test pin CNP610	speed checker reading	frequency counter reading
high	RV602	short	−0.33~0.33%	5,980~ 6,020 Hz
normal	RV601	open	−0.33~0.33%	2,990~ 3,010 Hz

Adjustment Location:

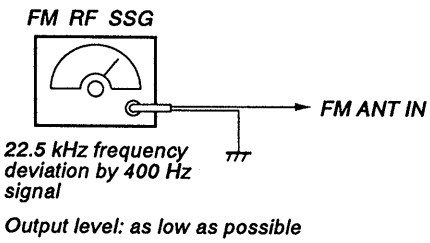


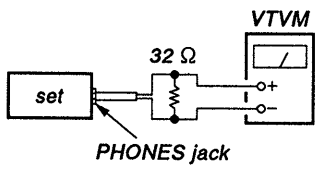
TUNER SECTION

[AM]
BAND switch: AM


AM RF SSG
Put the lead-wire antenna close to the set.
30% amplitude modulation by 400 Hz signal
Output level: as low as possible

[FM]
BAND switch: FM





- **Positions of switches and control knobs**
  FUNCTION ..... RADIO
  MODE ..... STEREO
  ISS 2
  VOLUME ..... standard output level position

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM FREQUENCY COVERAGE ADJUSTMENT		
Adjustment part	Frequency Display	Reading on Digital voltmeter
L1	530kHz (531kHz)	1.0±0.1V
(confirmation)	1,710kHz	8.0±1.0V

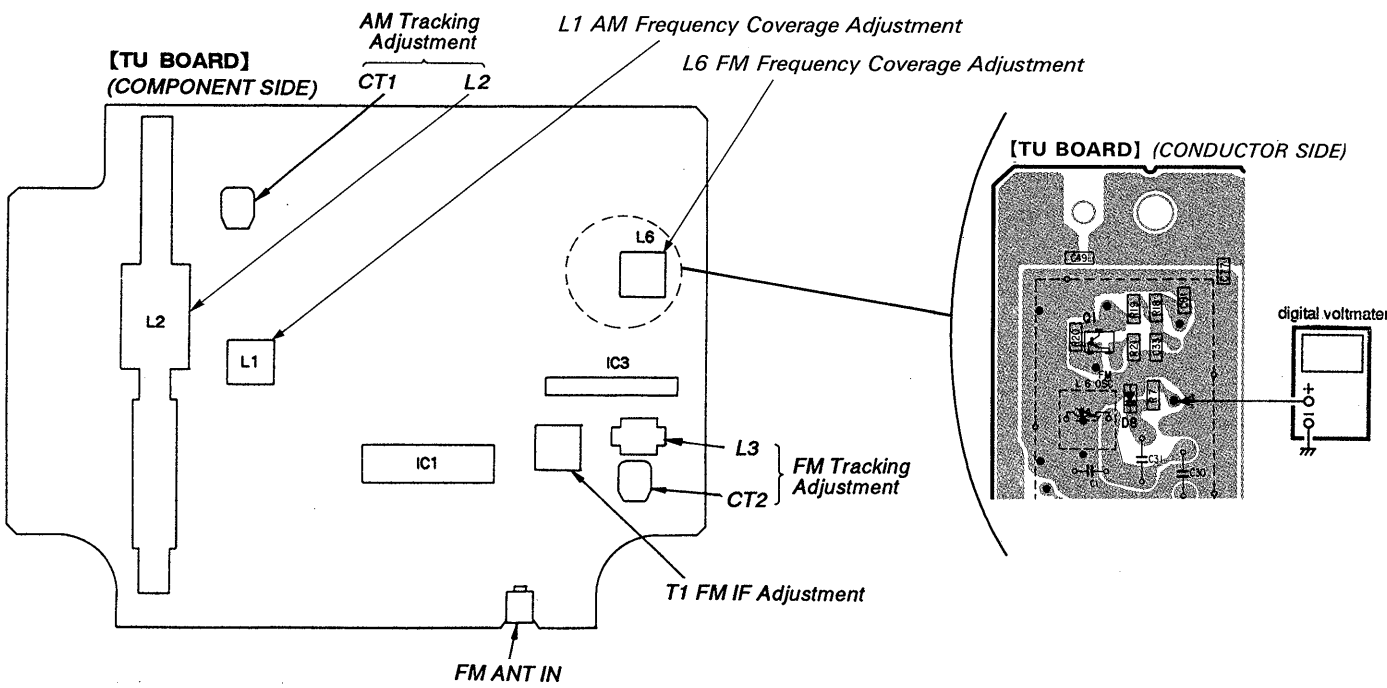
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L2	620 kHz
CT1	1,400 kHz

FM FREQUENCY COVERAGE ADJUSTMENT		
Adjustment part	Frequency Display	Reading on Digital voltmeter
L6	87.5MHz	2.0±0.1V
(confirmation)	108.0MHz	7.0±1.0V

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L3	87.5 MHz
CT2	108 MHz

FM IF ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
T1	10.7 MHz

Adjustment Location:



REVISED

CD SECTION

Notes on Adjustment

1. Perform adjustment in service mode.
   After adjustment, be sure to release test mode.
2. Perform adjustments in the order given.
3. Use the disc (YEDS-18, Part No. 3-702-101-01) only when so indicated.

Before Adjustment

Put the set into test mode and perform the following checks. Repair if there are any problems.

How to Put into the Test Mode

1. Remove a backup battery.
2. Short-circuit between the points CD T.P (Ⓐ and Ⓑ) on the CONTROL board.
3. Turn the power on. (T-1 in LCD turns on.)
4. Release the short-circuit position CD T.P (Ⓐ and Ⓑ).
5. After adjustment, be sure to reset the TEST mode by pressing the POWER key.

- **Sled Motor Check**

  Press ▷▯▯ key, then press □ key.

  Press ▶▶▯ , ▯◀◀ keys and comfirm that the FOP moves smoothly from the innermost to outermost circumference and back smoothly and with no catching or abnormal noises. (Cancellation of BTL mute.)

  ▶▶▯ : FOP moves to the outer circumference

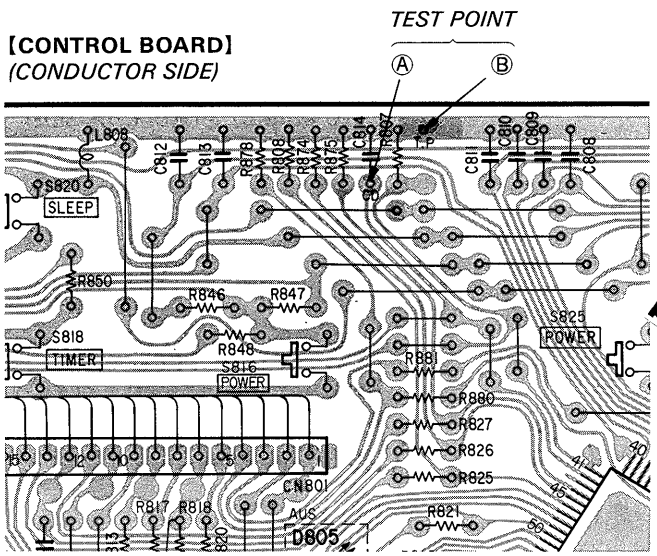
  ▯◀◀ : FOP moves to the inner circumference

- **Focus Search Check**

1. Press ▷▯▯ key. (Focus search operation is performed continuously.)
2. Look at the FOP objective lens and confirm that it moves up and down smoothly three times, with no catching or abnormal noises. After then confirm the turntable turns about a minute.

Note: When the malfunction is occured by pressing other keys, turn off the power and check again from making the test mode.

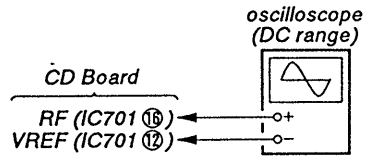
[CONTROL BOARD]
(CONDUCTOR SIDE)



Focus Bias Adjustment

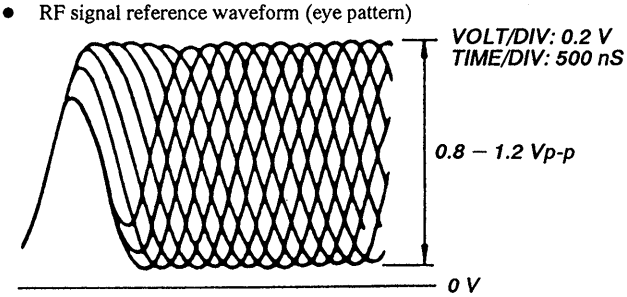
This adjustment is to be done when the optical block replaced.

Adjustment Procedure:



1. Connect the oscilloscope between IC701 pins ⑯ and ⑫.
2. Put the set into test mode.
3. Press the ▶▶▯ and ▯◀◀ keys to move the FOP to the center. (Move the FOP to the music area on the disc to enable easy visibility of the eye pattern.)
4. Insert disc(YEDS-18). Press TUNING− (minus) key and press ▷▯▯ key.
5. Adjust RV702 so that the oscilloscope waveform os as shown in the figure below (eye pattern).
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.
6. Release test mode after adjustment is completed.

- RF signal reference waveform (eye pattern)



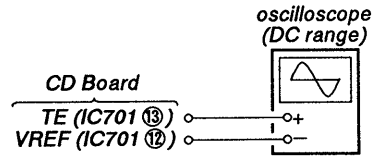
When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensivity.

Adjustment Location: CD board (See page 40)

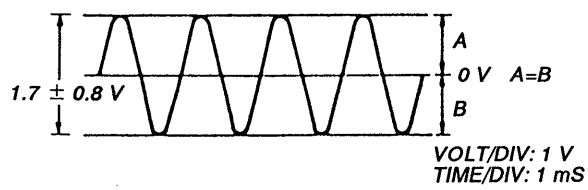
E. F Balance Adjustment

This adjustment is to be done when the optical block is replaced.

Adjustment Procedure:



1. Connect the oscilloscope between IC701 pins ⑬ and ⑫.
2. Put the set into service mode.
3. Press the ▶▶▯ and ▯◀◀ keys to move the FOP to the center.
4. Insert disc(YEDS-18) and press TUNING − (minus) key.
5. Adjust RV701 so that the oscilloscope traverse waveform is symmetrical, as shown in the figure below.
6. Release servise mode after adjustment is completed.



Adjustment Location: CD board (See page 40)

REVISED

REFERENCE

Focus/Tracking Gain Adjustment

A frequency response analyzer is necessary in order to perform this adjustment exactly.
However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.
Focus/tracking gain determines the pickup follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when the 2-axis device operate.
However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

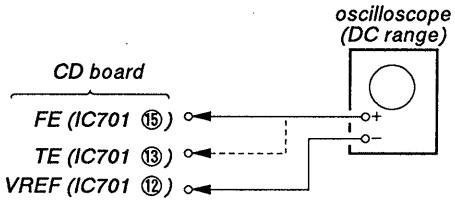
Gain / Symptoms	Focus	Tracking
• The time until music starts becomes longer for STOP ➡▷▯▯ PLAY or automatic selection (⏮ , ⏭ buttons pressed). (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP ➡ ▷▯▯ PLAY or automatic selection (⏮ , ⏭ buttons pressed).	—	low
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

– Simple Adjustment –

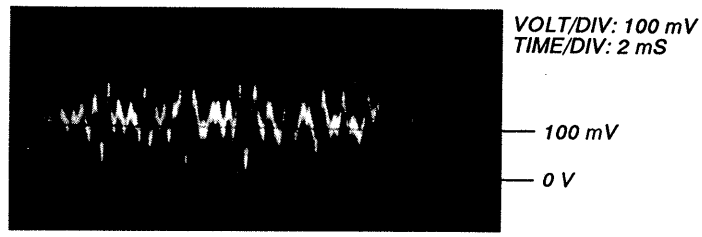
Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the simple adjustment are only a little different, return the controls to the original position.

Procedure:



1. Keep the set horizontal.
   If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.
2. Put the set into test mode.
   Insert disc(YEDS-18). Press TUNING− (minus) key and press ▷▯▯ key.
3. Connect the oscilloscope between IC701 pins ⑮ and ⑫.
4. Adjustment RV704 so that the waveform is as shown in the figure below. (focus gain adjustment)

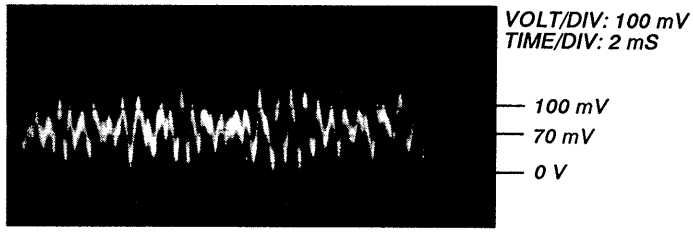
Adjustment Location: CD board (See page 40)



- Incorrent Examples (DC level changes more than on adjusted waveform)

low focus gain

high focus gain

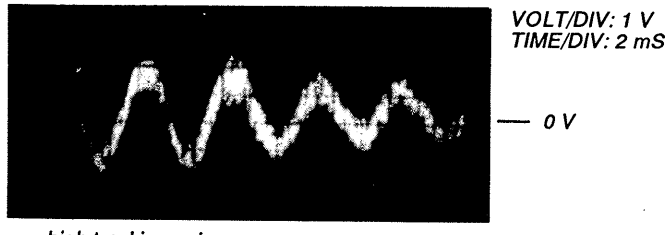


5. Connect the oscilloscope between IC701 pins ⑬ and ⑫.
6. Adjust RV703 so that the waveform is as shown in the figure below. (tracking gain adjustment)

Adjustment Location: CD board (See page 35)

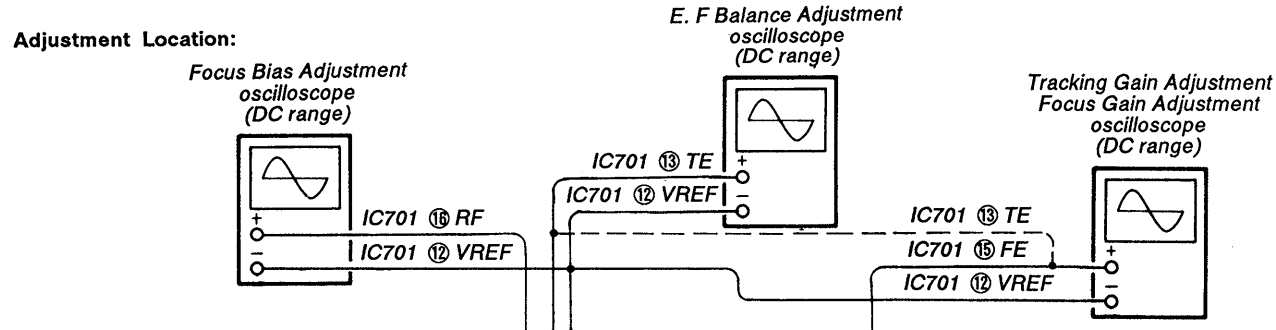
- Incorrect Examples (fundamental wave appears)

low tracking gain

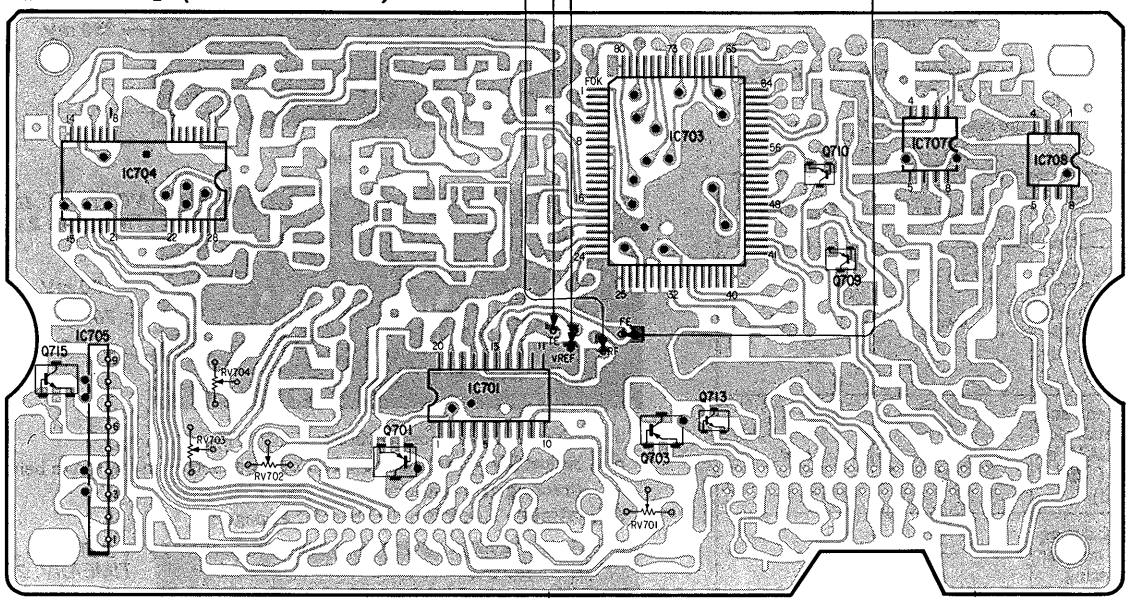


high tracking gain
(higher fundamental wave than for low gain)

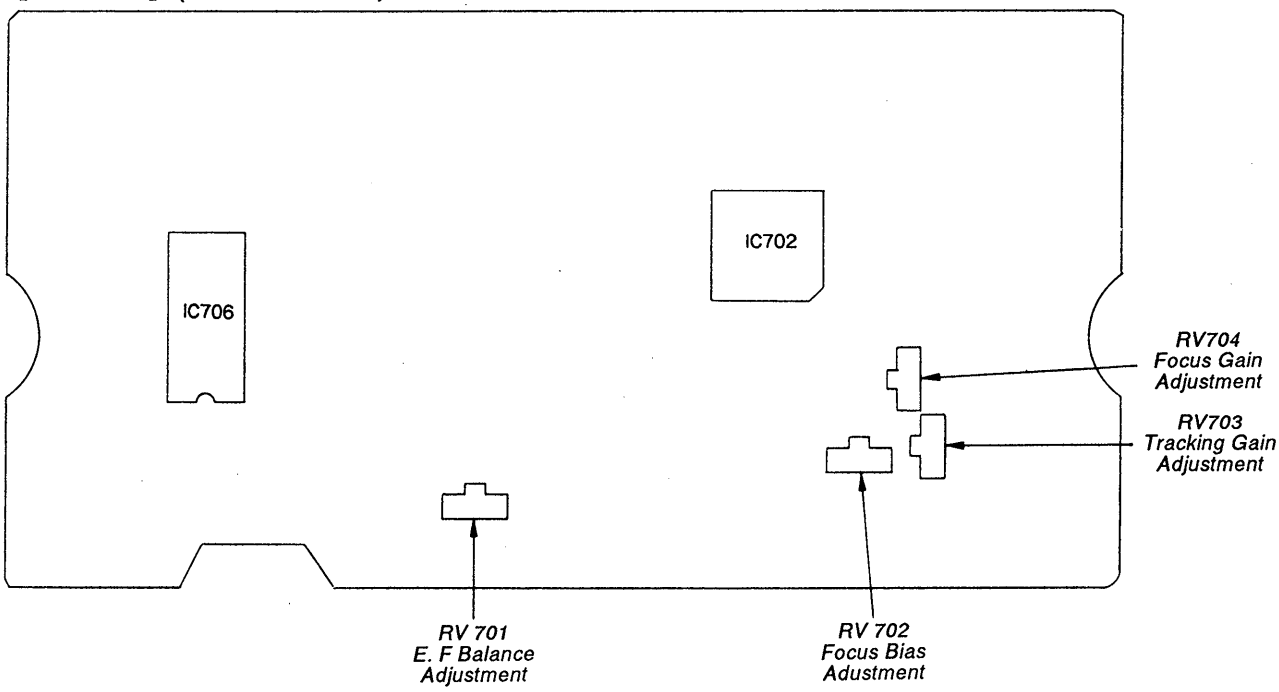
Adjustment Location:



【CD BOARD】 *(CONDUCTOR SIDE)*



【CD BOARD】 *(COMPONENT SIDE)*



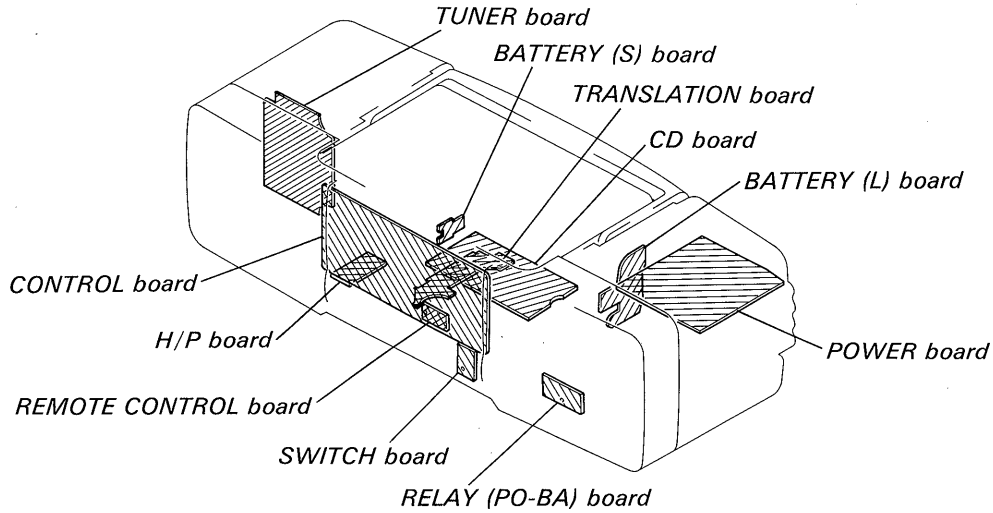
SECTION 6
DIAGRAMS

6-1. IC801 (CXP50716-041Q) PIN FUNCTION DESCRIPTION

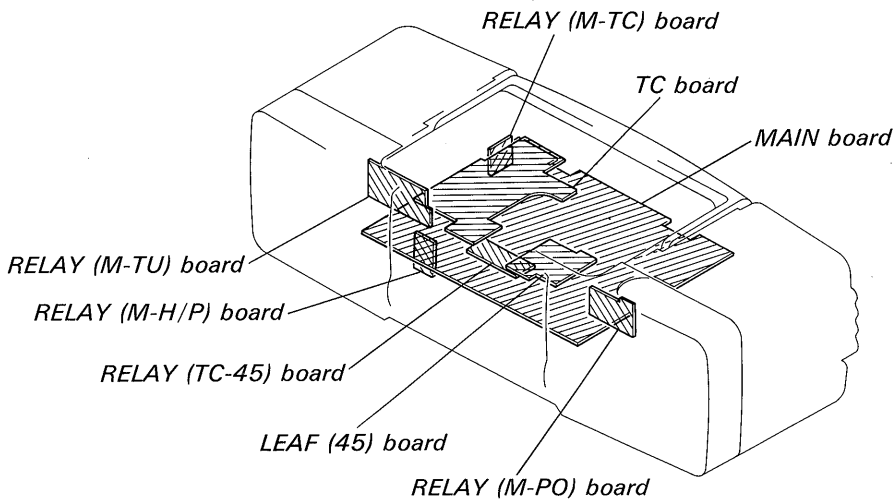
PIN No.	Name	I/O	Description
1 ~ 3	PG1/SEG18 ~ PG3/SEG16	O	SEGMENT OUT
4 ~ 19	SEG15 ~ SEG0	O	SEGMENT OUT
20 ~ 23	COM3 ~ COM0	O	COMMON OUTPUT
24 ~ 26	V_{LC1} ~ V_{LC3}		LCD VOLTAGE SET UP
27	V_L	O	VOL CHIP SELECT
28	RMC	I	REMOTE CONTROL DECODER IN
29	INT	I	CD SCOR IN
30	XTAL		MAIN CLK (32.768kHz)
31	EXTAL	I	MAIN CLK (32.768kHz)
32	RST	I/O	MICROCOMPUTER RESET
33	NC		
34	V_{DD}		+B
35 ~ 38	AD0/PI0 ~ AD3/PI3	I/O	KEY IN
39	AD4/PB0	I/O	KEY IN
40	AD5/PB1	I/O	REV, REC IN/TU 9K, 10K
41	AD6/PB2	I/O	CD SENS/TU MPX IN
42	AD7/PB3	I/O	CD TRAY OPEN, CLOSE DETECT
43	NC		
44	PX0/SC	I/O	CLOCK FOR SUB Q/ TU DATA
45	PX1/SO	I/O	TU CONT DATA
46	PX2/SI	I	SUB Q DATA/ TU DATA
47	PA0 B	I/O	CD SYSTEM LATCH/ TU PLL IC CE
48	PA1 I	I/O	MD VOLTAGE DECREASE
49	PA2 T	I/O	S-P DATA IN
50	PA3	I/O	S-P DATA OUT/ REG CHECK CD CONT DATA
51	PF0 P	I/O	CD LEASER ON
52	PF1 O	I/O	VOLUME DATA
53	PF2 R	I/O	CD SYSTEM RESET
54	NC		
55	PE0 P	I/O	AUDIO S-P CS
56	PE1 O	I/O	CD DATA CLK/ S-P CLK
57	PE2 R	I/O	BLOCK MUTE
58	PE3 T	I/O	POWER CONTROL
59	NC		
60	PY1/PWM	O	AUDIO MUTE
61	PY2/WP	I	WAKE UP IN
62	PY3/EC	I	TU SD IN
63 ~ 66	PD0/SEG31 ~ PD3/SEG28	O	SEGMENT OUT
67 ~ 70	PC0/SEG27 ~ PC3/SEG24	O	SEGMENT OUT
71	V_{SS}		GROUND
72	TX		4.19MHz
73	NC		
74	TEX	I	4.19MHz
75	V_{REF}		V REFERENCE
76 ~ 79	PH0/SEG23 ~ PH3/SEG20	O	SEGMENT OUT
80	PG0/SEG19	O	SEGMENT OUT

6-2. CIRCUIT BOARDS LOCATION

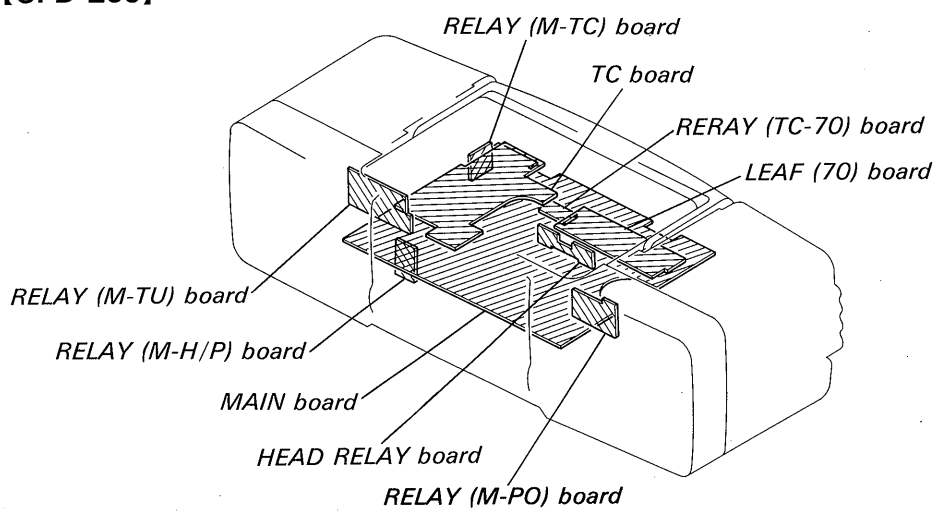
[CFD-250/260]



[CFD-250]



[CFD-260]

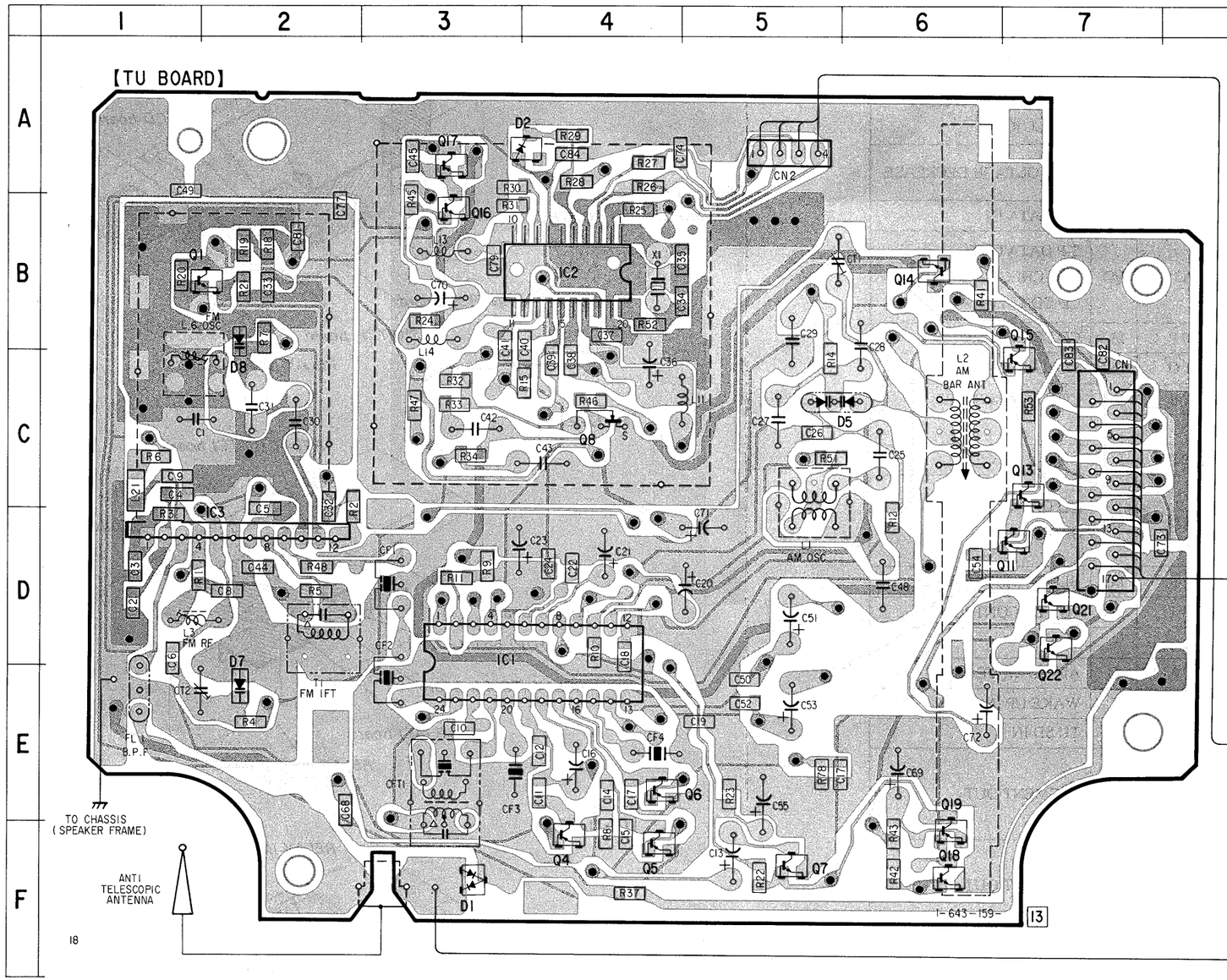


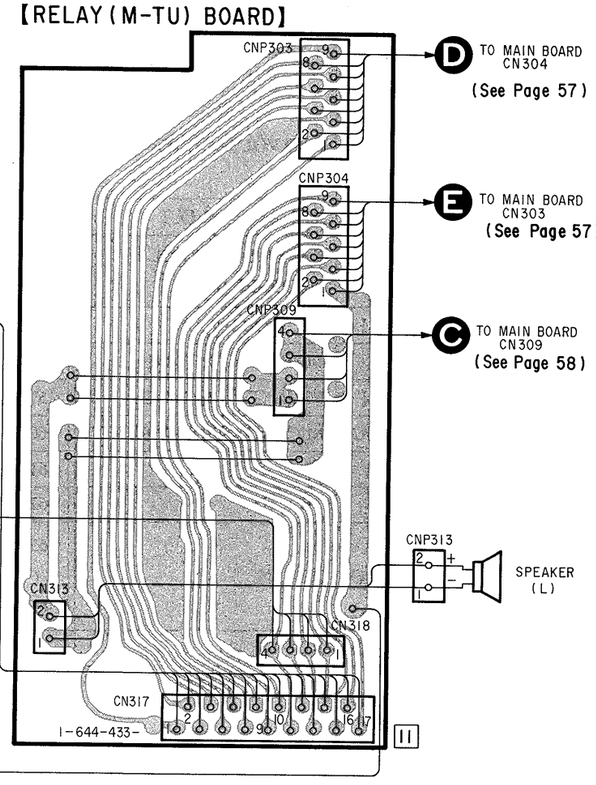
6-3. PRINTED WIRING BOARD —TUNER Section—

• See page 42, 56 for Circuit Boards Location and Semiconductor Lead Layouts.

● **Semiconductor Location**

Ref. No.	Location
D1	F-3
D2	A-4
D5	C-6
D7	E-2
D8	B-2
IC1	E-3
IC2	B-4
IC3	D-2
Q1	B-1
Q4	F-4
Q5	F-5
Q6	E-4
Q7	F-5
Q8	C-4
Q11	D-7
Q13	C-7
Q14	B-6
Q15	B-7
Q16	B-3
Q17	A-3
Q18	F-6
Q19	F-6
Q21	D-7
Q22	D-7



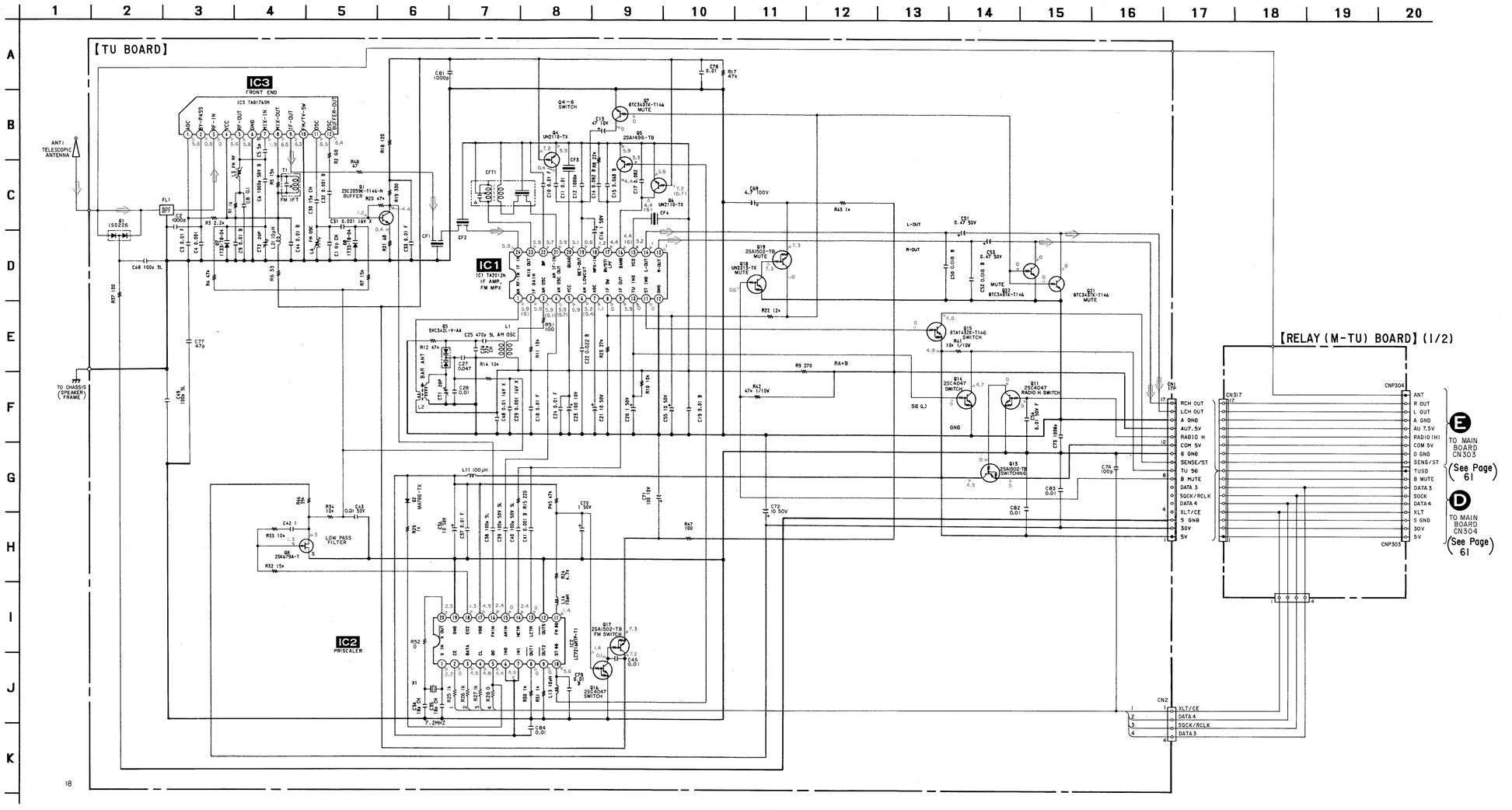


Note:

- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.
- ▒▒ : Pattern of the rear side.

6-4. SCHEMATIC DIAGRAM
—TUNER Section—

• See page 71, 72 for IC Block Diagrams.



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- ○ ⟹: B+ Line
- ○ ▭: adjustment for repair.
- ○ Power voltage is dc 12 V and fed with regulated dc power supply from external BATTERY TERMINAL.
- ○ Voltage is dc with respect to ground under no-signal (detuned) conditions.
  no mark: FM
  ( ): AM
- ○ Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- ○ Signal path.
  ⇨: FM

6-5. PRINTED WIRING BOARD —CD Section—

• See page 42, 56 for Circuit Boards Location and Semiconductor Lead Layouts.

● Semiconductor Location

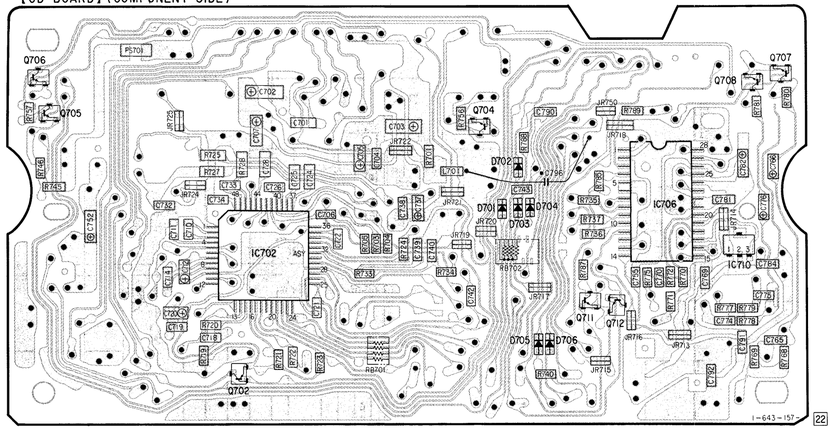
Ref. No.	Location
D701	C-5
D702	B-6
D703	C-6
D704	C-6
D705	D-6
D706	D-6
IC701	H-4
IC702	C-3
IC703	F-5
IC704	G-2
IC705	H-1
IC706	C-7
IC707	F-7
IC708	F-8
IC710	C-8
Q701	H-3
Q702	D-3
Q703	H-5
Q704	B-5
Q705	B-1
Q706	B-1
Q707	B-8
Q708	B-8
Q709	G-6
Q710	F-6
Q711	D-6
Q712	D-6
Q713	H-5
Q715	H-1

Note:
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ● : Through hole.
- ▒ : Pattern from the side which enables seeing.

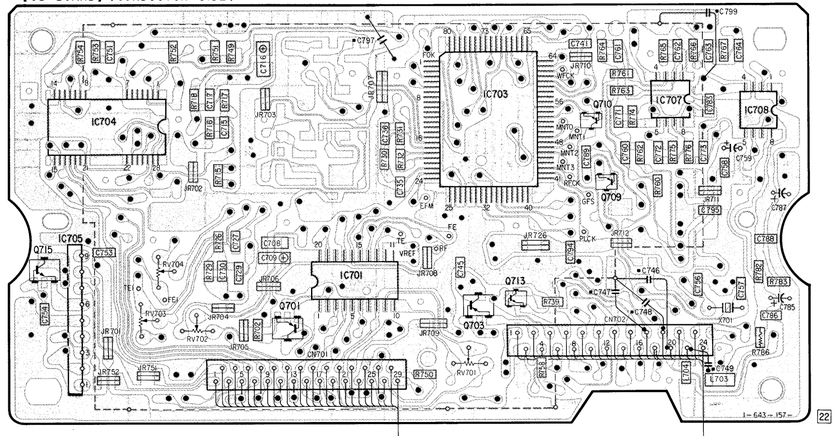
(The other layers' patterns are not indicated.)

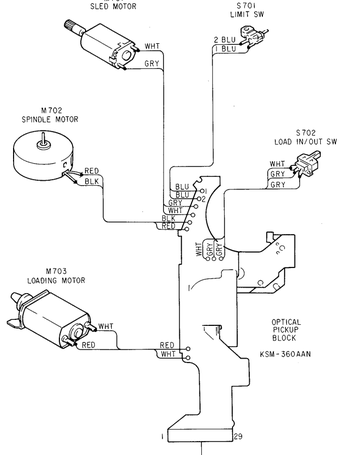
Caution :	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side : (Component Side)	Parts on the parts face side seen from the parts face are indicated.

【CD BOARD】(COMPONENT SIDE)



【CD BOARD】(CONDUCTOR SIDE)

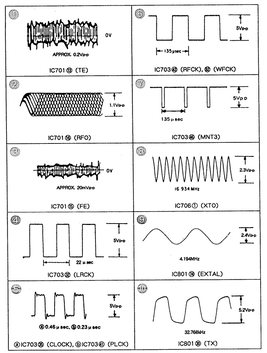




6-6. SCHEMATIC DIAGRAM —CD Section—

· See page 71, 72 for IC Block Diagrams.

• Waveforms (MODE: PLAY)

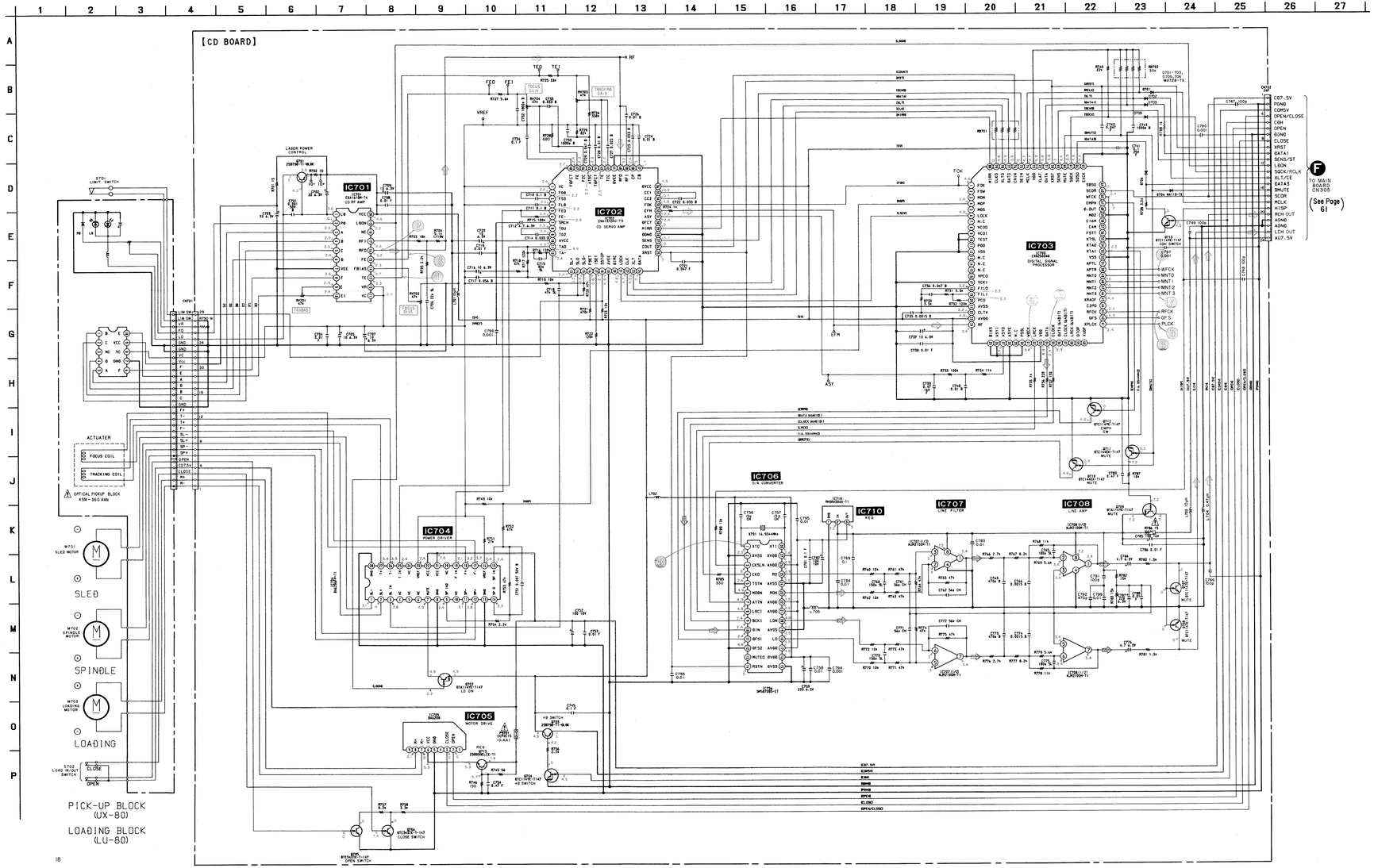


Note:

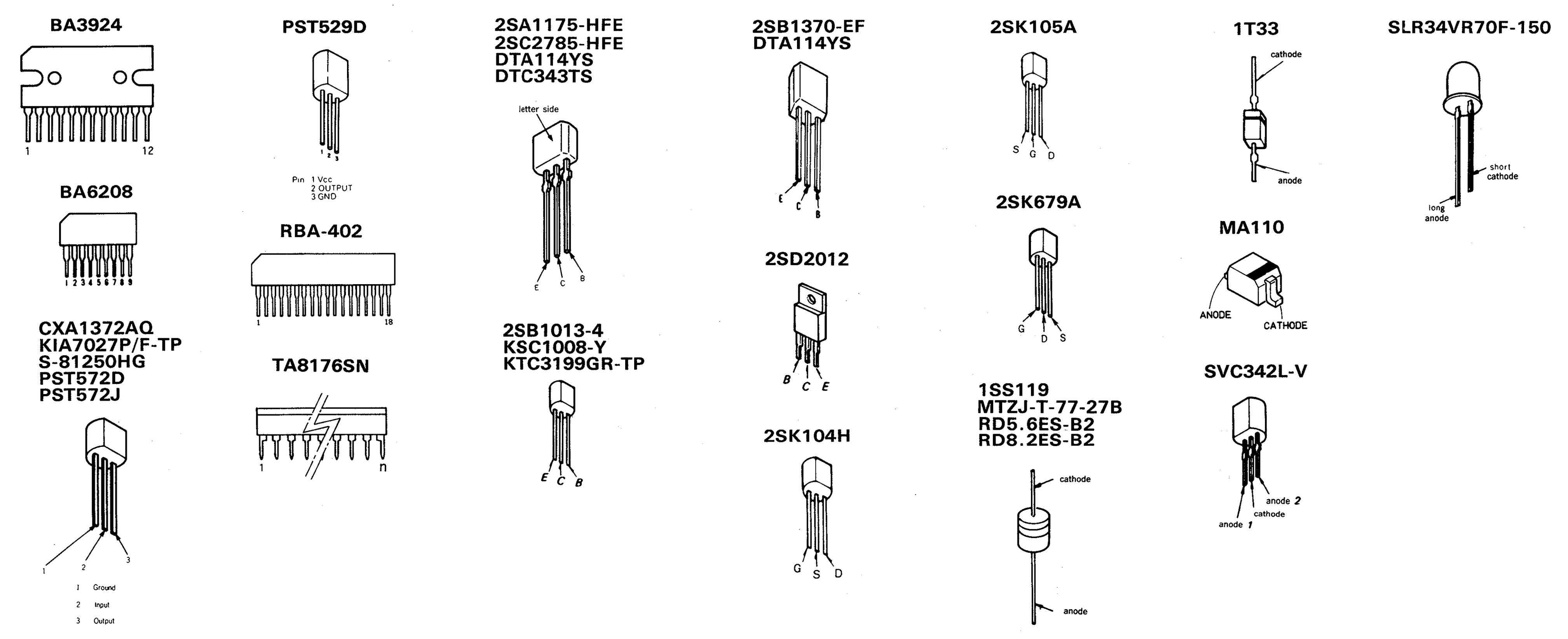
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	**Note:** Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line
- : adjustment for repair.
- Power voltage is dc 12 V and fed with regulated dc power supply from external BATTERY TERMINAL.
- Voltage and waveforms are dc with respect to ground.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD



● SEMICONDUCTOR LEAD LAYOUTS



6-7. PRINTED WIRING BOARDS —AUDIO/TC SECTION—

· See page 42, 56 for Circuit Boards Location and Semiconductor Lead Layouts.

● Semiconductor Location

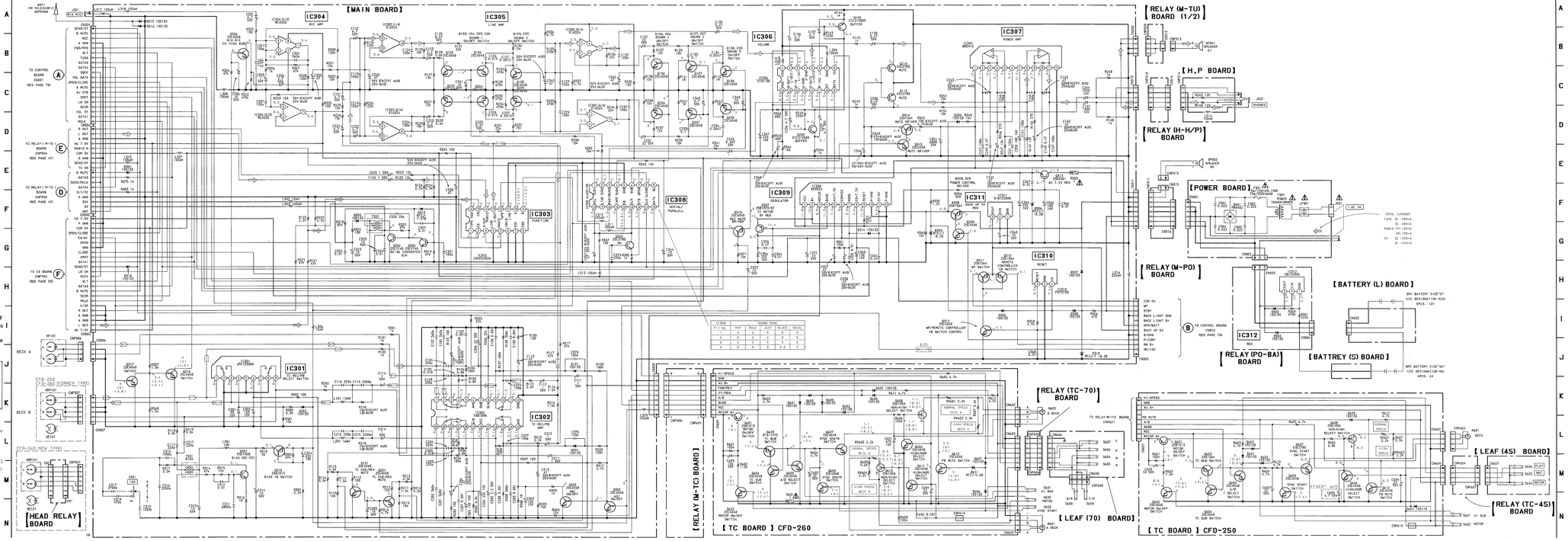
Ref. No.	Location	Ref. No.	Location
D101	G-15	Q106	E-21
D201	H-15	Q107	D-22
D302	E-13	Q108	D-22
D303	H-24	Q109	G-19
D304	J-21	Q110	G-19
D305	B-24	Q201	C-20
D306	H-18	Q203	C-20
D307	B-24	Q204	D-19
D308	B-23	Q205	D-19
D309	B-24	Q206	E-19
D310	B-23	Q207	E-20
D313	H-24	Q208	E-20
D314	I-21	Q209	F-18
D315	J-15	Q210	G-19
D316	J-15	Q301	K-14
D318	C-16	Q302	I-15
D601	E-8	Q303	H-15
D602	E-9	Q304	I-24
D603	E-9	Q305	I-24
D604	E-4	Q306	J-15
D605	D-8	Q307	I-19
D606	F-6	Q308	C-24
D607	F-6	Q309	C-24
D608	E-7	Q310	B-24
D609	F-7	Q311	B-24
D611	E-6	Q312	B-24
D901	C-31	Q313	I-18
D902	D-27	Q314	G-22
D903	D-27	Q315	G-23
		Q316	B-16
IC301	E-13	Q317	B-16
IC302	G-14	Q318	H-13
IC303	E-16	Q319	B-13
IC304	J-16	Q320	B-19
IC305	D-20	Q601	G-9
IC306	G-19	Q602	G-8
IC307	J-20	Q603	F-8
IC308	B-20	Q604	F-9
IC309	I-21	Q605	F-8
IC310	B-24	Q606	F-10
IC311	C-24	Q607	G-4
		Q608	F-10
Q101	F-15	Q609	G-5
Q103	C-20	Q611	F-10
Q104	D-21	Q612(CFD-250)	F-7
Q105	D-22	Q612(CFD-260)	E-5

Note:
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.

AUS: Australian

6-8. SCHEMATIC DIAGRAMS —AUDIO/TC Section—

· See page 71, 72 for IC Block Diagrams.



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- : fusible resistor.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line
- Total current is measured with no cassette installed.
- Power voltage is dc 12 V and fed with regulated dc power supply from external BATTERY TERMINAL.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  - : FM
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)
  - : CD

6-9. PRINTED WIRING BOARDS
—CONTROL Section—

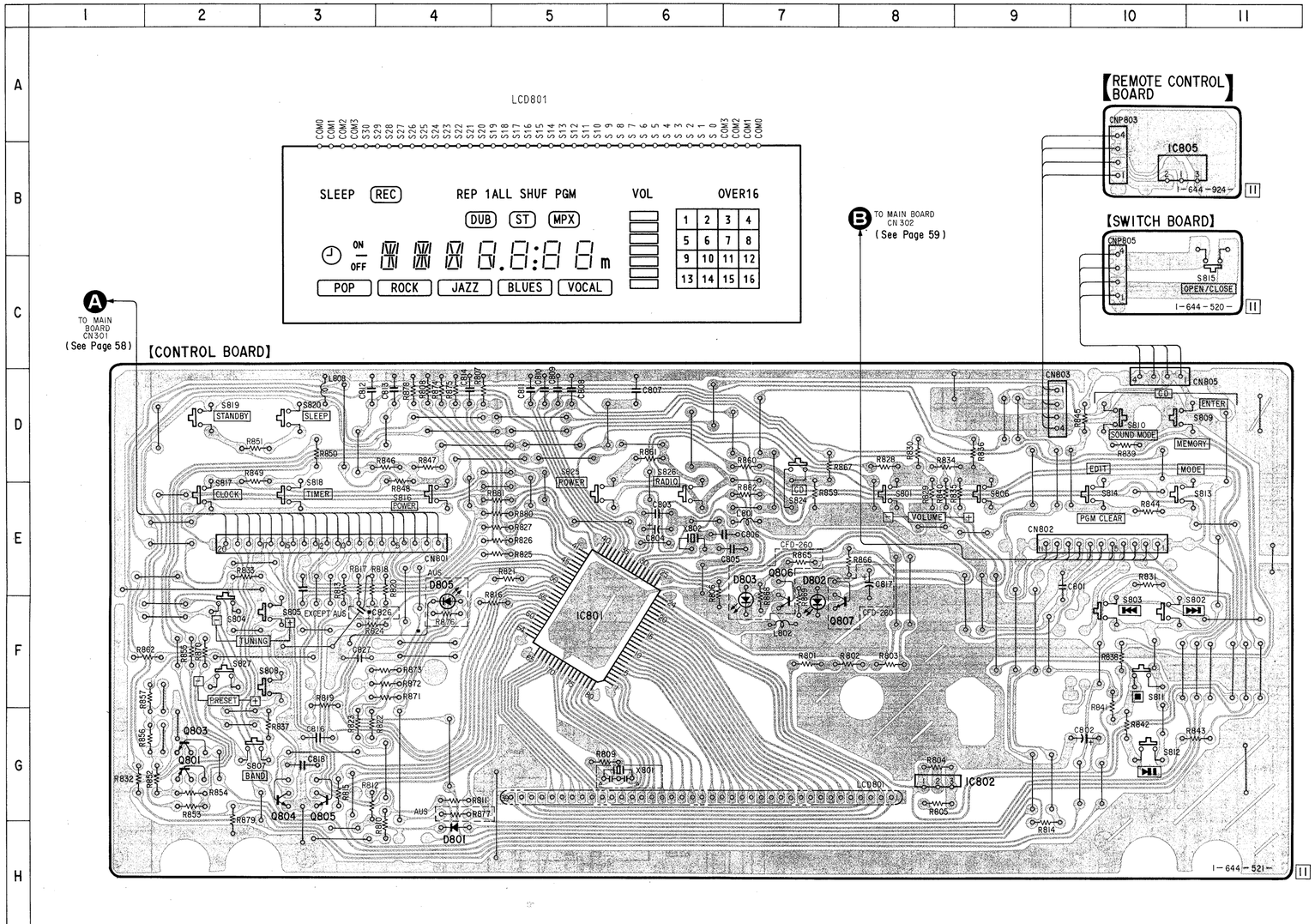
• See page 42, 56 for Circuit Boards Location and Semiconductor Lead Layouts.

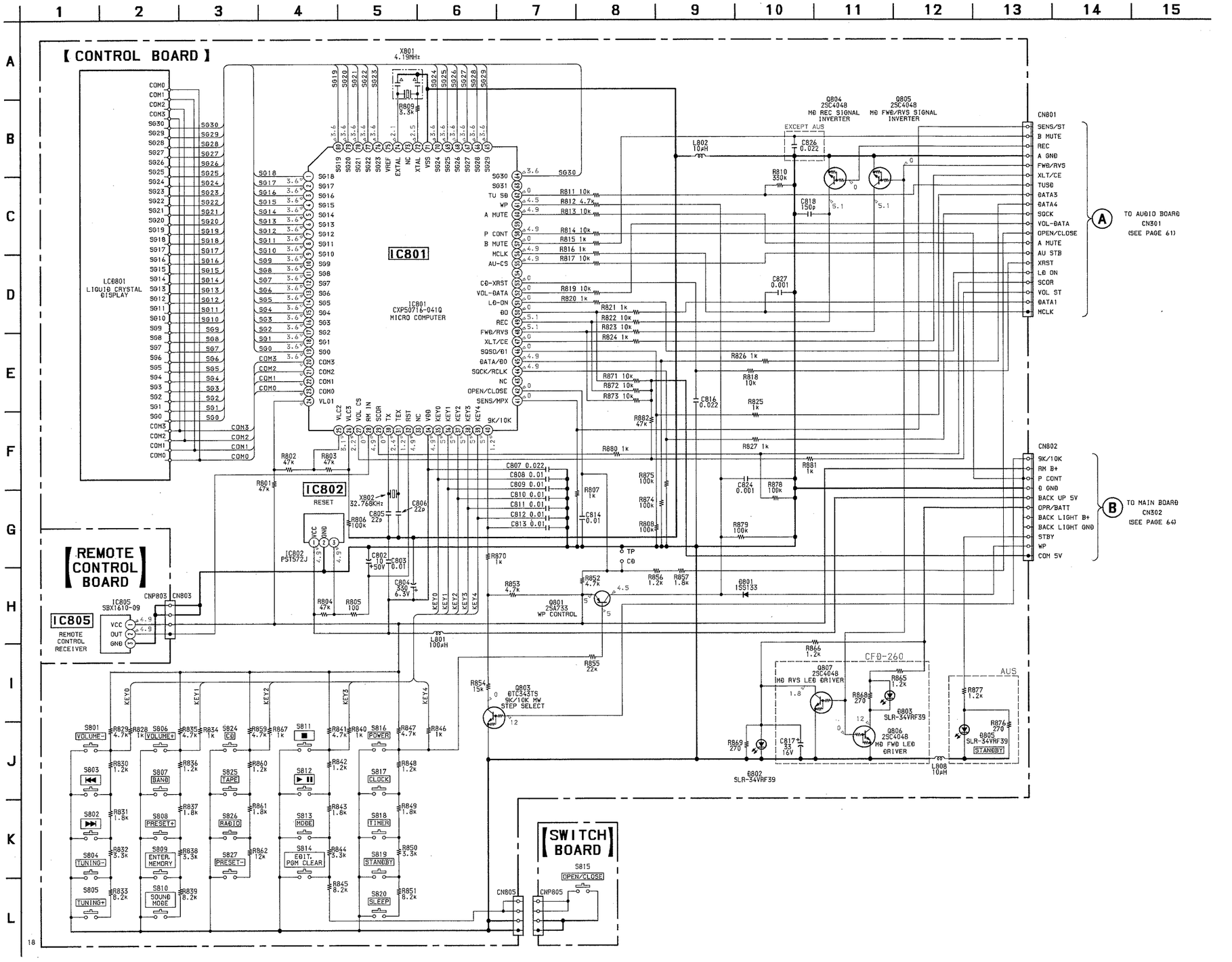
● Semiconductor Location

Ref. No.	Location
D801	H-4
D802	E-7
D803	F-7
D805	F-4
IC801	F-5
IC802	G-8
IC805	B-10
Q801	G-2
Q803	G-2
Q804	G-3
Q805	G-3
Q806	E-7
Q807	F-8

Note:
- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.

AUS: Australian





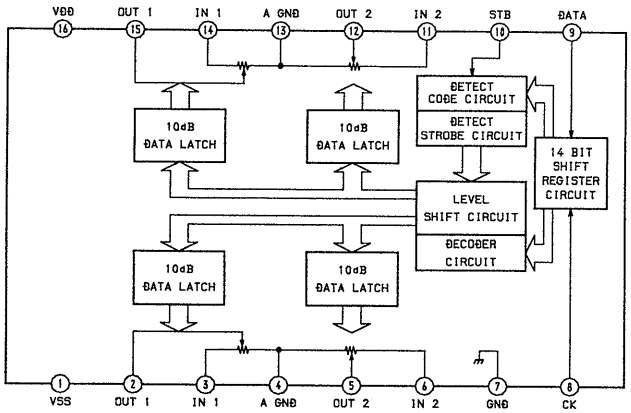
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- ⊖ ═══ : B+ Line
- ⊖ Power voltage is dc 12 V and fed with regulated dc power supply from external BATTERY TERMINAL.
- ⊖ Voltage is dc with respect to ground under no-signal (detuned) conditions.
- ⊖ Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

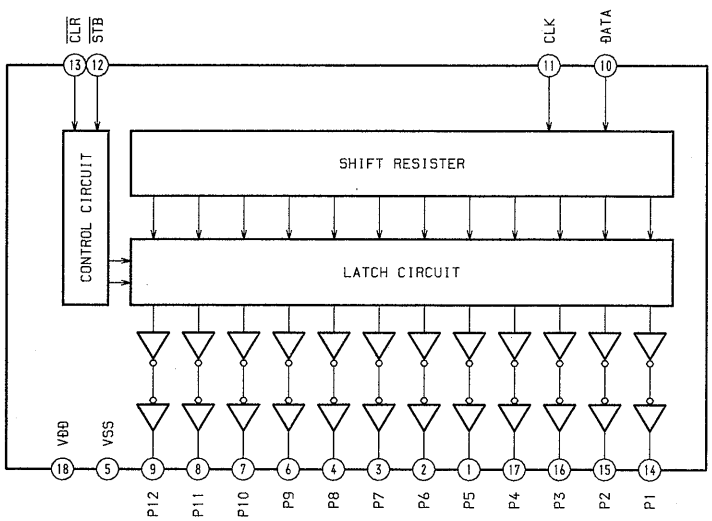
AUS: Australian

● IC Block Diagrams

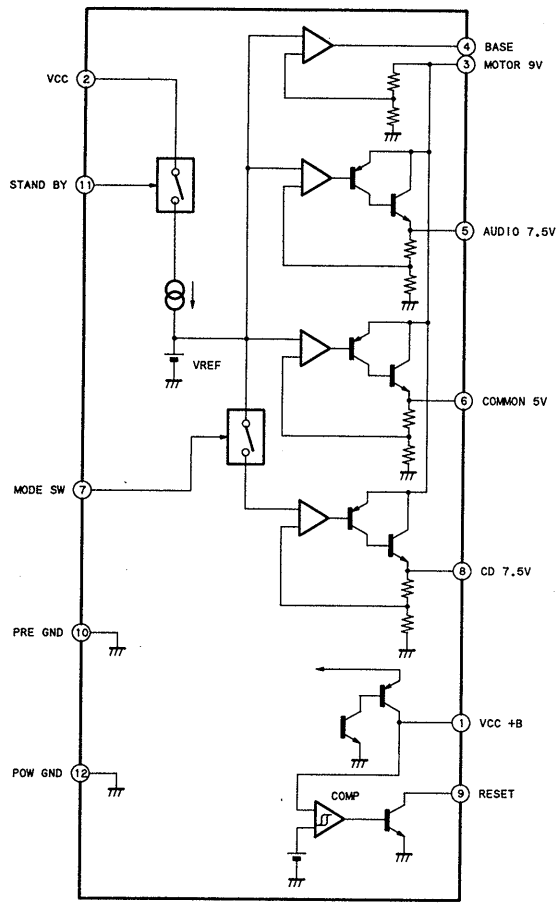
IC306 TC9213P (MAIN BOARD)



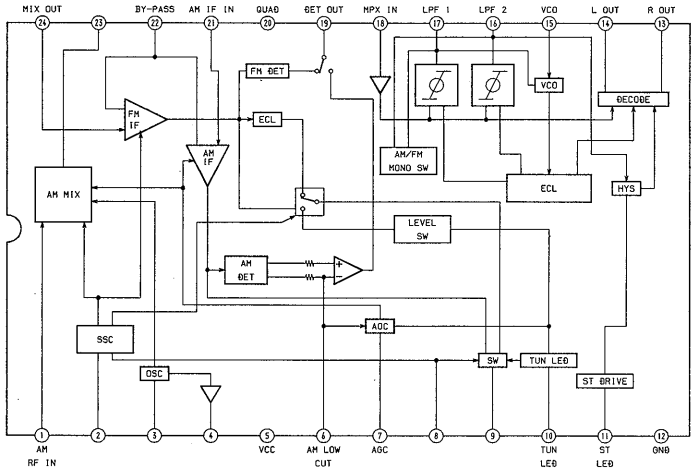
IC308 NJU3713 (MAIN BOARD)



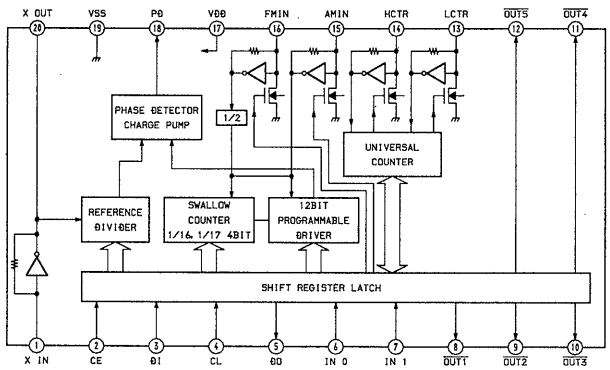
IC309 BA3924 (MAIN BOARD)



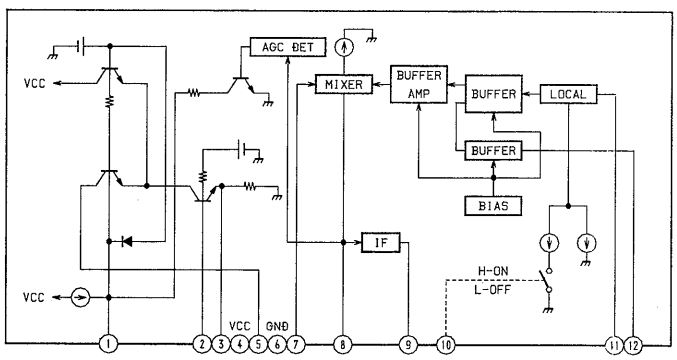
IC1 TA2010N (TU BOARD)



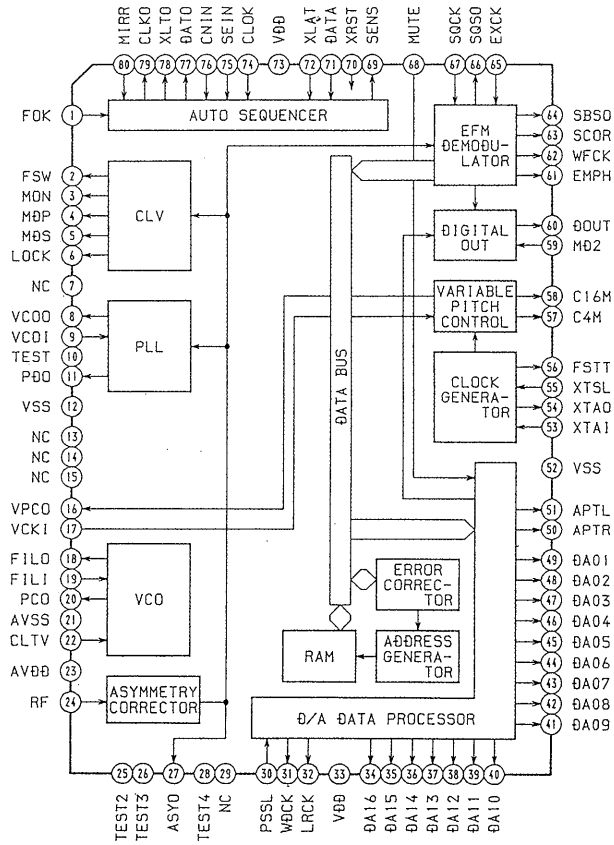
IC2 LC7216MA (TU BOARD)



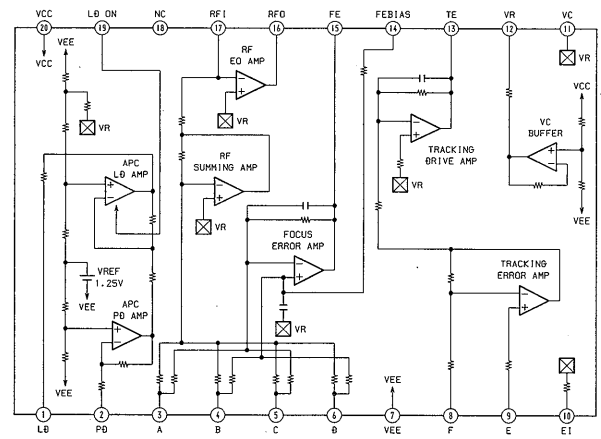
IC3 TA8176SN (TU BOARD)



IC703 CXD2500AQ (CD BOARD)



IC701 CXA1610M (CD BOARD)



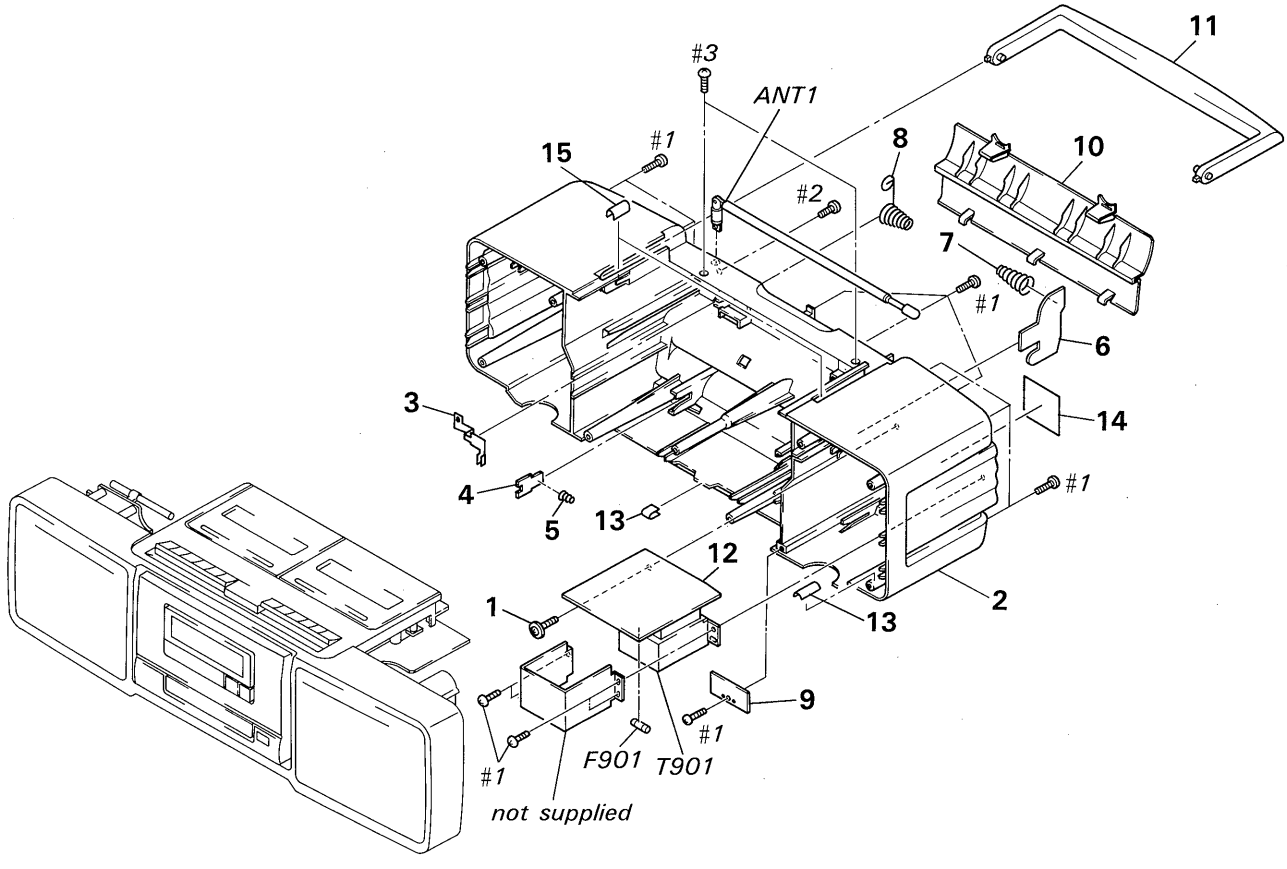
SECTION 7
EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE)... (RED)
  ↑ ↑
  Parts color Cabinet's color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardwear (#mark) list is given in the last of this parts list.
- Abbreviations
  CND:Canadian model
  AUS:Australian model
  E=E94:Taiwan model

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

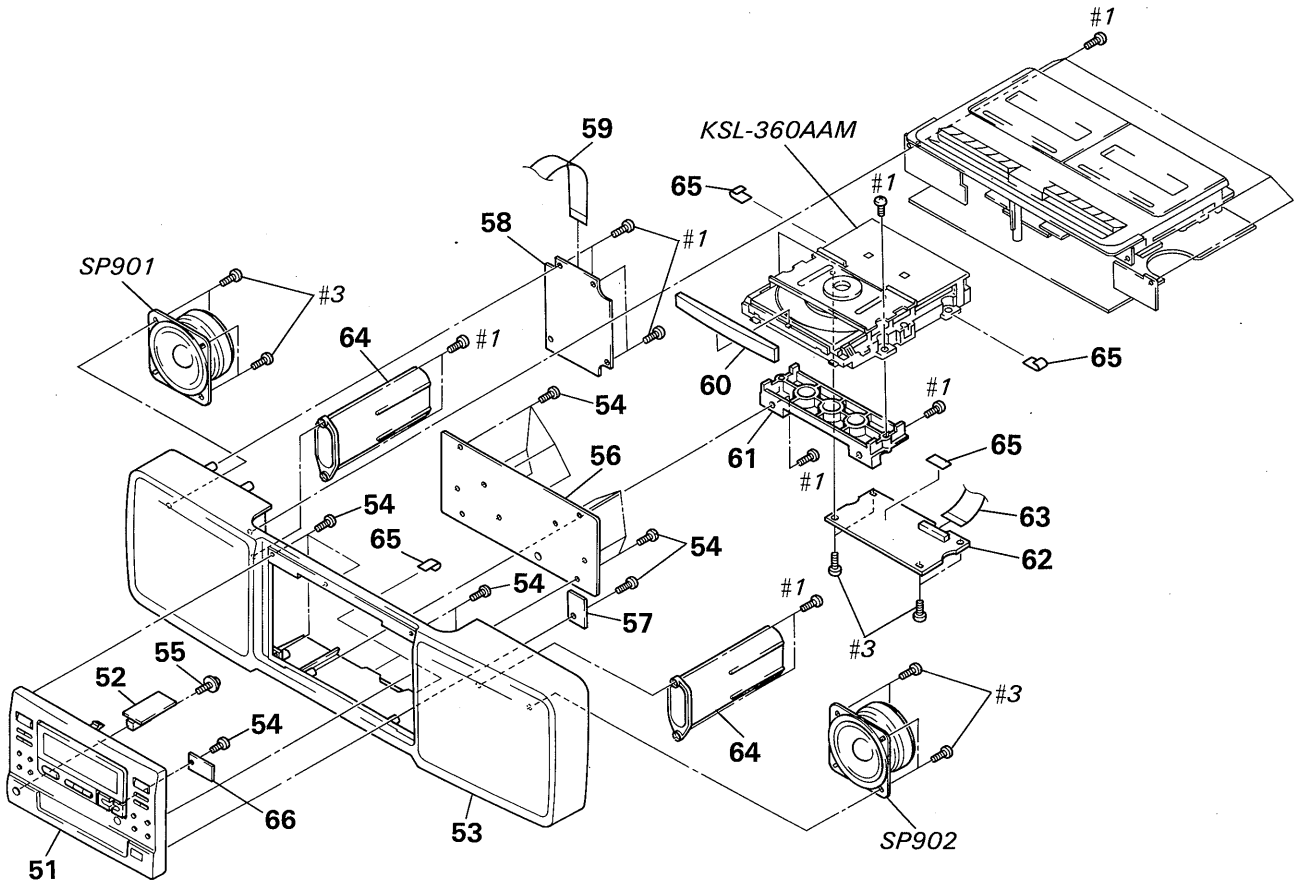
Les components identifiés parune marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par unepièc portant le numéro spéccifié.

7-1. REAR CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	3-384-192-01	SCREW, WASHER	
2	3-380-597-01	CABINET, REAR	(US, CND)
2	3-380-597-11	CABINET, REAR	(AUS)
2	3-380-597-21	CABINET, REAR	(E)
* 3	3-380-661-01	TERMINAL, ANTENNA	
* 4	1-644-434-11	BATTERY (S) BOARD	
5	4-938-731-01	SPRING (B), BATTERY	
* 6	1-644-444-11	BATTERY (L) BOARD	
7	4-938-730-01	SPRING (A), BATTERY	
8	3-380-667-01	SPRING (COM)	
* 9	1-644-445-11	RELAY (PO-BA) BOARD	
10	3-380-619-01	LID, BATTERY	
11	X-3365-273-1	HANDLE ASSY	
* 12	1-644-438-11	POWER BOARD	
13	3-831-441-XX	CUSHION, SPEAKER	
* 14	3-380-681-01	NAME PLATE	(CFD-260:CND)
* 14	3-380-682-01	NAME PLATE	(CFD-250:CND)
* 14	3-387-045-01	NAME PLATE	(E)
15	3-713-907-01	SPACER, CAM	
ANT1	1-501-480-11	ANTENNA, TELESCOPIC	
⚠F901	1-532-299-00	FUSE, TIME-LAG (5A/250V)	(AUS)
⚠F901	1-576-030-11	FUSE, GLASS TUBE (5A/125V)	(EXCEPT AUS)
⚠T901	1-423-303-11	TRANSFORMER, POWER	(AUS)
⚠T901	1-450-967-11	TRANSFORMER, POWER	(EXCEPT AUS)

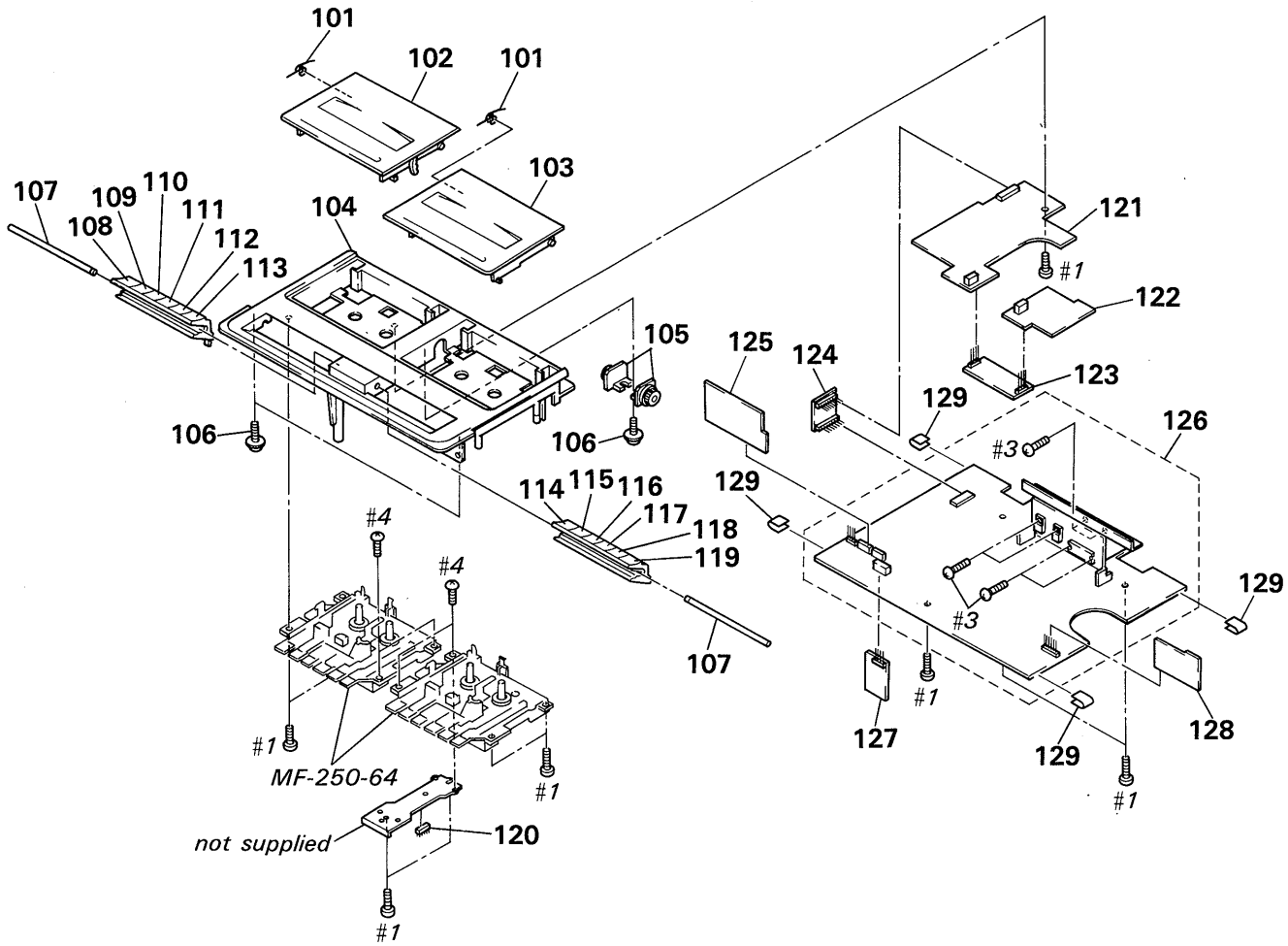
7-2. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark
51	X-3365-249-1	PANEL SUB ASSY, CONTROL	(AUS)
51	X-3365-275-1	PANEL SUB ASSY, CONTROL	(CFD-250:US, CND)
51	X-3365-277-1	PANEL SUB ASSY, CONTROL	(CFD-260)
* 52	1-644-431-11	H/P BOARD	
53	X-3365-272-1	CABINET SUB ASSY, FRONT	
54	4-931-757-41	SCREW (DIA. 2.6X10) (IT3B)	
55	3-365-853-01	SCREW (+BTPWH) (3X12)	
* 56	A-3262-570-A	CONTROL BOARD, COMPLETE	(CFD-250:US, CND)
* 56	A-3262-587-A	CONTROL BOARD, COMPLETE	(CFD-260)
* 56	A-3262-983-A	CONTROL BOARD, COMPLETE	(AUS)
* 57	1-644-520-11	SWITCH BOARD	
* 58	A-3275-480-A	TUNER BOARD, COMPLETE	(EXCEPT AUS)

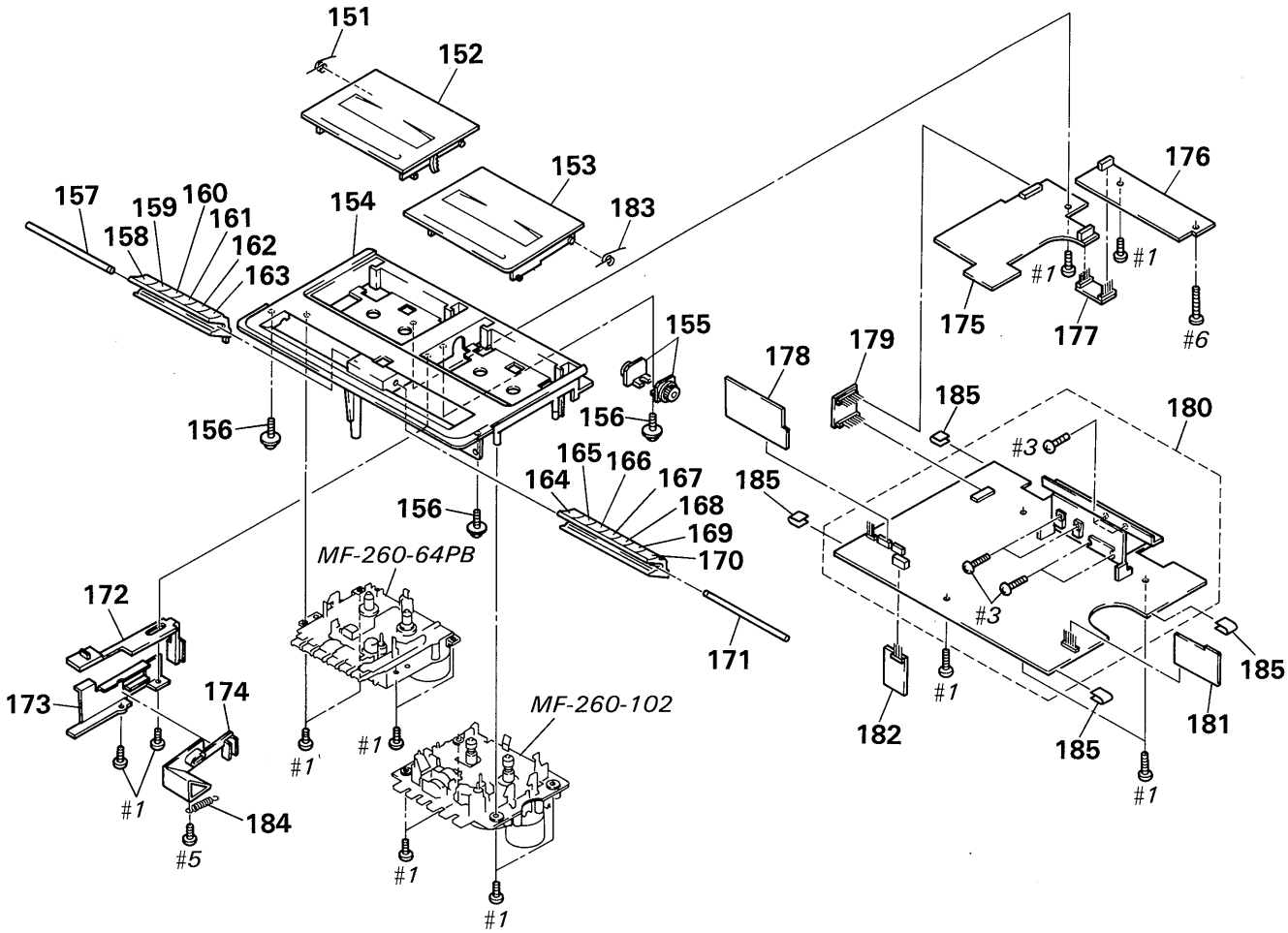
Ref. No.	Part No.	Description	Remark
* 58	A-3275-713-A	TUNER BOARD, COMPLETE	(AUS)
59	1-696-060-11	WIRE, PARALLEL (FFC) (17 CORE)	
60	3-380-642-01	PLATE, ORNAMENTAL, CD	
* 61	3-380-630-01	CHASSIS, CD	
* 62	A-3262-571-A	CD BOARD, COMPLETE	
63	1-696-061-11	WIRE, PARALLEL (FFC) (24 CORE)	
* 64	3-380-648-01	SPEAKER, DUCT	
65	3-831-441-XX	CUSHION, SPEAKER	
* 66	1-644-924-11	REMOTE CONTROL BOARD	
SP901	1-544-700-11	SPEAKER	(CFD-260)
SP901	1-544-700-21	SPEAKER	(CFD-250)
SP902	1-544-700-11	SPEAKER	(CFD-260)
SP902	1-544-700-21	SPEAKER	(CFD-250)

7-3. UPPER CABINET SECTION (CFD-250)



Ref. No.	Part No.	Description	Remark
101	3-380-666-01	SPRING (A), OPEN	
102	X-3365-278-1	HOLDER ASSY (A), CASSETTE	
103	X-3365-276-1	HOLDER ASSY (B), CASSETTE	
104	3-380-604-01	CABINET, UPPER	
105	3-351-377-01	DAMPER	
106	3-380-672-01	SCREW, WASHER	
107	3-380-576-01	SHAFT, MD (45)	
108	3-380-622-01	BUTTON (STOP/EJECT-A), 45	
109	3-380-623-01	BUTTON (HI DUBBING-A), 45	
110	3-380-626-01	BUTTON (PLAY-A), 45	
111	3-380-627-01	BUTTON (REW-A), 45	
112	3-380-628-01	BUTTON (FF-A), 45	
113	3-380-629-01	BUTTON (PAUSE-A), 45	
114	3-380-634-01	BUTTON (STOP/EJECT-B), 45	
115	3-380-635-01	BUTTON (REC-B), 45	
116	3-380-636-01	BUTTON (PLAY-B), 45	
117	3-380-637-01	BUTTON (REW-B), 45	
118	3-380-639-01	BUTTON (FF-B), 45	
119	3-380-640-01	BUTTON (PAUSE-B), 45	
120	4-934-522-01	CUSHION	
* 121	A-3262-561-A	TC BOARD, COMPLETE	
* 122	1-644-440-11	LEAF (45) BOARD	
* 123	1-644-442-11	RELAY (TC-45) BOARD	
* 124	1-644-446-11	RELAY (M-TC) BOARD	
* 125	1-644-433-11	RELAY (M-TU) BOARD	
* 126	A-3262-562-A	MAIN BOARD, COMPLETE	(US, CND)
* 126	A-3262-982-A	MAIN BOARD, COMPLETE	(AUS)
* 127	1-644-435-11	RELAY (M-H/P) BOARD	
* 128	1-644-432-11	RELAY (M-PO) BOARD	
129	3-831-441-XX	CUSHION, SPEAKER	

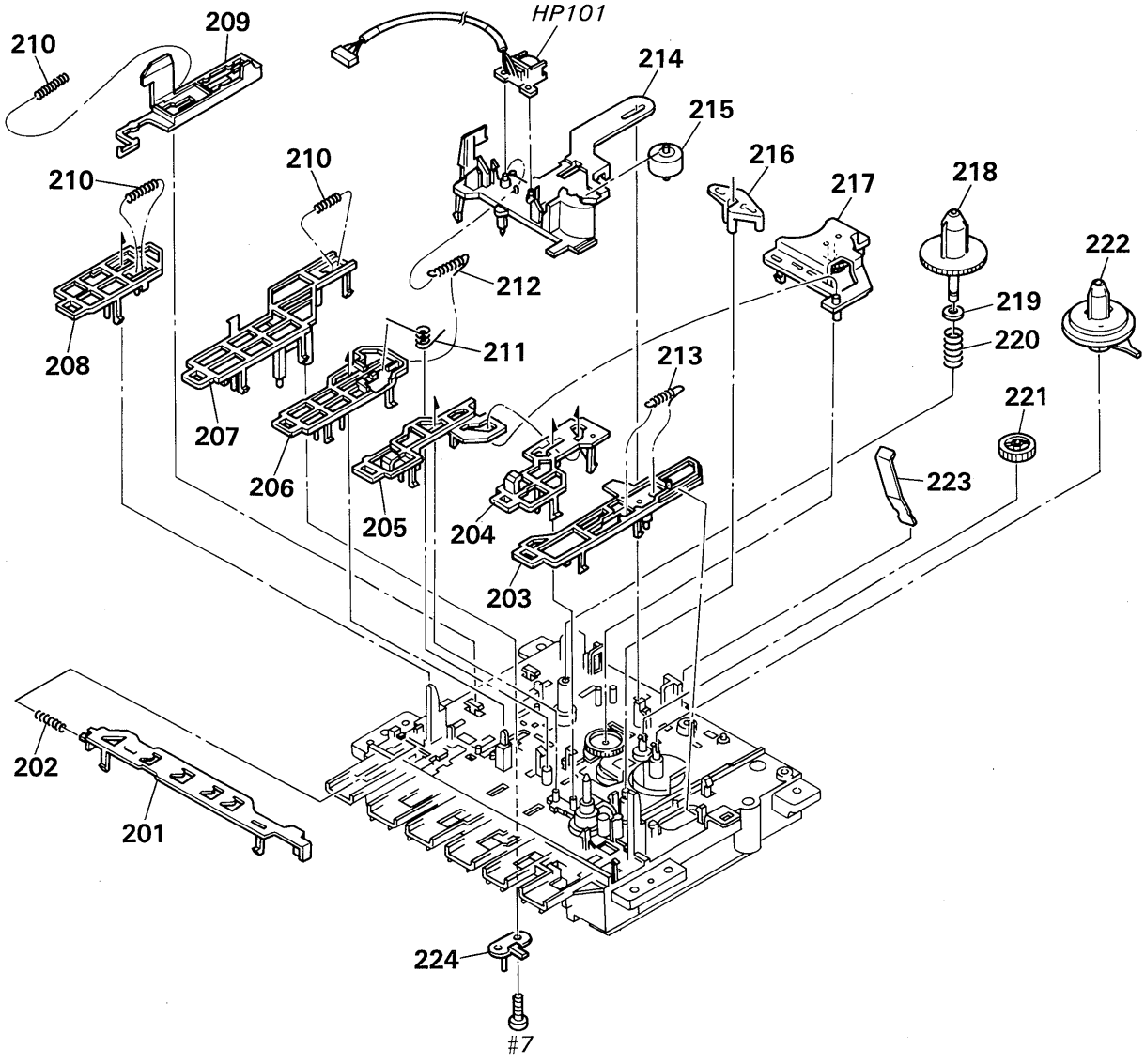
7-4. UPPER CABINET SECTION (CFD-260)



Ref. No.	Part No.	Description	Remark
151	3-380-666-01	SPRING (A), OPEN	
152	X-3365-278-1	HOLDER ASSY (A), CASSETTE	
153	X-3365-279-1	HOLDER ASSY (B), CASSETTE	
154	3-380-649-01	CABINET, UPPER	
155	3-351-377-01	DAMPER	
156	3-380-672-01	SCREW, WASHER	
157	3-380-576-01	SHAFT, MD (45)	
158	3-380-622-01	BUTTON (STOP/EJECT-A), 45	
159	3-380-623-01	BUTTON (HI DUBBING-A), 45	
160	3-380-626-01	BUTTON (PLAY-A), 45	
161	3-380-627-01	BUTTON (REW-A), 45	
162	3-380-628-01	BUTTON (FF-A), 45	
163	3-380-629-01	BUTTON (PAUSE-A), 45	
164	3-380-652-01	BUTTON (DIR), 70	
165	3-380-654-01	BUTTON (REC-B), 70	
166	3-380-655-01	BUTTON (PLAY-B), 70	
167	3-380-656-01	BUTTON (REW-B), 70	
168	3-380-657-01	BUTTON (FF-B), 70	

Ref. No.	Part No.	Description	Remark
169	3-380-658-01	BUTTON (PAUSE-B), 70	
170	3-380-653-01	BUTTON (STOP/EJECT-B), 70	
171	3-380-679-01	SHAFT, MD (70)	
172	3-380-683-01	LEVER, MODE	
173	3-380-659-01	BRACKET (MODE)	
174	3-380-660-01	LEVER, DIR	
* 175	A-3262-580-A	TC BOARD, COMPLETE	
* 176	1-644-441-11	LEAF (70) BOARD	
* 177	1-644-443-11	RELAY (TC-70) BOARD	
* 178	1-644-433-11	RELAY (M-TU) BOARD	
* 179	1-644-446-11	RELAY (M-TC) BOARD	
* 180	A-3262-562-A	MAIN BOARD, COMPLETE	(US, CND)
* 180	A-3264-060-A	MAIN BOARD, COMPLETE	(E)
* 181	1-644-432-11	RELAY (M-PO) BOARD	
* 182	1-644-435-11	RELAY (M-H/P) BOARD	
183	3-383-184-01	SPRING, OPEN (B)	
184	3-386-140-01	SPRING (DIR), TENSION	
185	3-831-441-XX	CUSHION, SPEAKER	

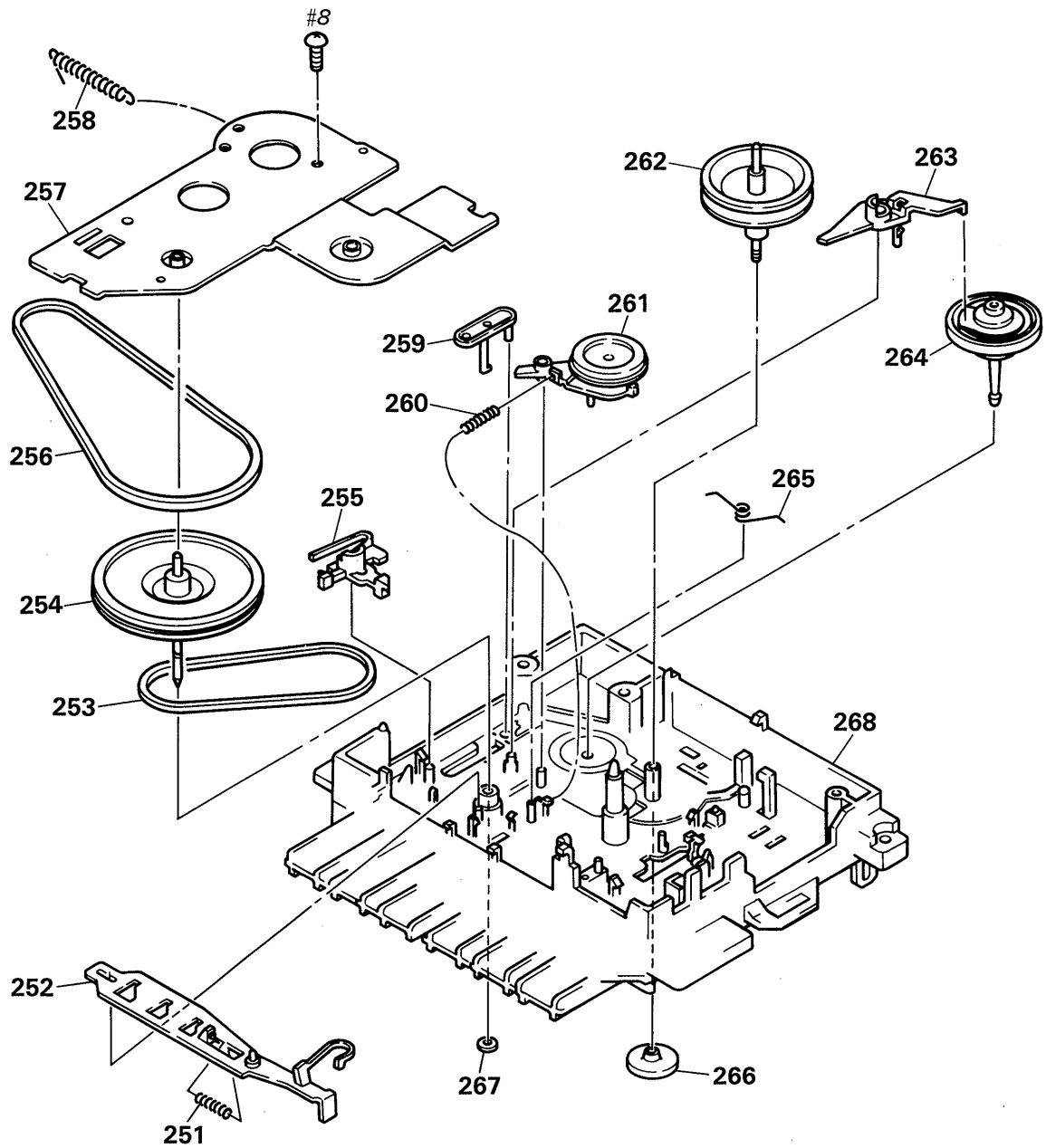
7-5. MECHANISM DECK SECTION-1 (CFD-250)
(DECK A : MF-250-64)



Ref. No.	Part No.	Description	Remark
201	4-932-695-01	SLIDER (FR), LOCK	
202	4-932-656-01	SPRING, COMPRESSION	
203	4-928-994-01	LEVER, PAUSE	
204	4-928-993-01	LEVER, FF	
205	4-928-992-01	LEVER, REW	
206	4-928-991-01	LEVER, PLAY	
207	4-921-195-01	LEVER (AC), REC	
208	4-928-985-01	LEVER, STOP	
209	4-936-206-01	SLIDER (S), EJECT	
210	4-932-648-01	SPRING, COMPRESSION	
211	4-928-973-01	SPRING	
212	4-928-972-01	SPRING, TENSION	
213	3-313-372-01	SPRING, TENSION	

Ref. No.	Part No.	Description	Remark
214	4-928-998-01	DECK (S), HEAD	
215	4-928-962-01	PINCH ROLLER	
216	4-928-982-01	LEVER (C)	
217	X-4920-347-1	LEVER (S) ASSY, FR	
218	4-928-978-01	GEAR (C), SUPPLY REEL	
219	4-931-795-11	WASHER	
220	3-343-381-01	SPRING, COMPRESSION	
221	3-343-285-01	GEAR, FF	
222	X-4920-350-1	GEAR (S) ASSY, T REEL	
223	4-928-957-01	RETAINER, CASSETTE	
224	4-928-976-01	LEVER, SW	
HP101	1-543-628-11	HEAD, MAGNETIC (PB)	

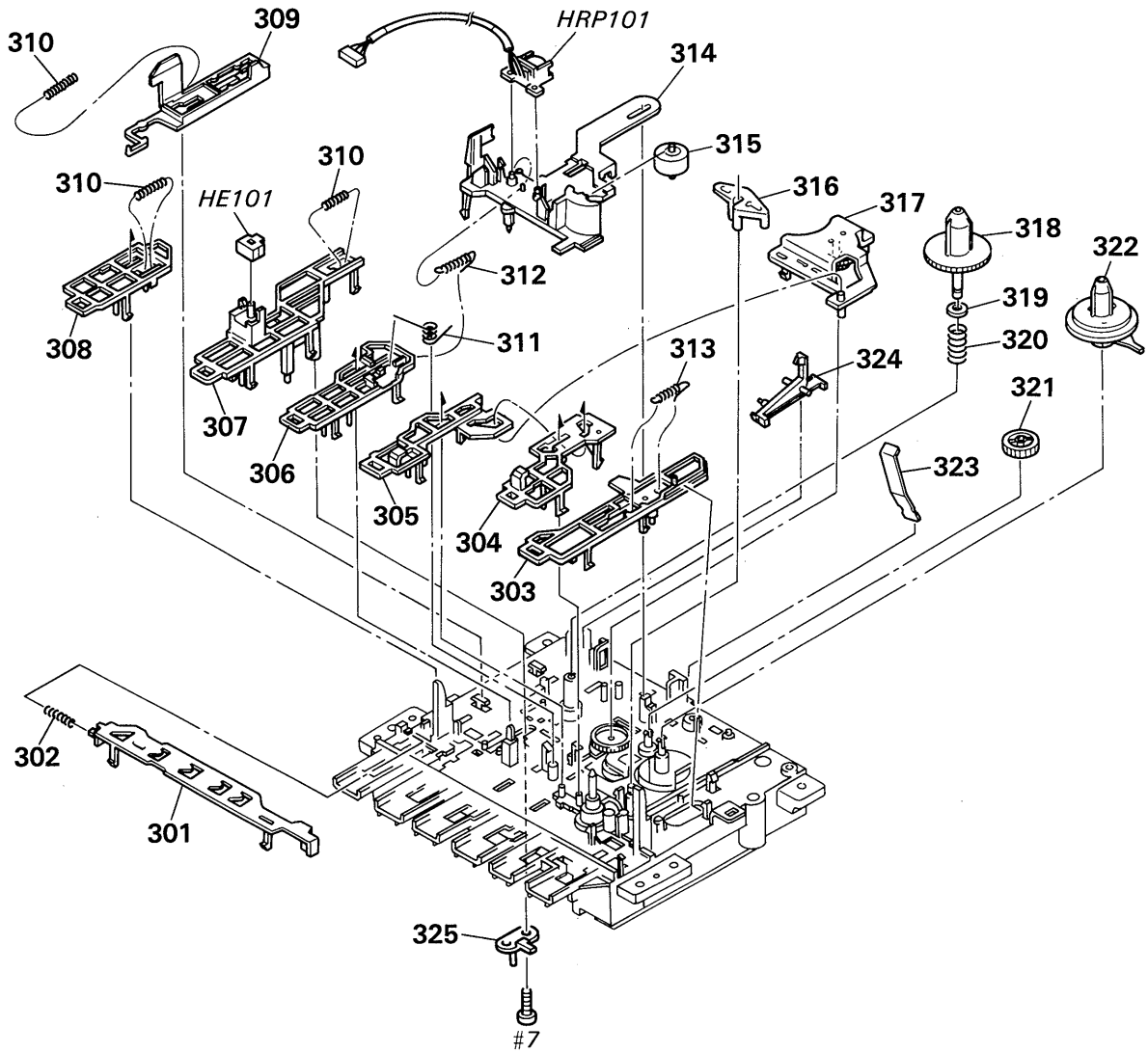
7-6. MECHANISM DECK SECTION-2 (CFD-250)
(DECK A : MF-250-64)



Ref. No.	Part No.	Description	Remark
251	4-932-656-01	SPRING, COMPRESSION	
252	4-928-996-01	LEVER, SW	
253	4-928-974-01	BELT (MIDWAY)	
254	X-4920-923-1	WHEEL (W) ASSY, CAPSTAN	
255	4-928-987-01	LEVER (T), SHUT-OFF	
256	4-934-520-01	BELT	
* 257	X-4918-598-1	PLATE ASSY, GROUND	
258	3-322-527-01	SPRING, TENSION	
259	4-928-961-01	PLATE, PAUSE LOCK	

Ref. No.	Part No.	Description	Remark
260	4-932-655-01	SPRING, COMPRESSION	
261	X-4920-346-2	LEVER (S) ASSY, IDLER	
262	X-4920-922-1	PULLEY (W) ASSY, FR	
263	4-928-986-01	LEVER (S), SHUT-OFF	
264	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
265	4-928-958-01	SPRING, FR RETURN	
266	4-928-967-01	GEAR (C), MIDWAY	
267	3-343-358-01	RING, RETAINING	
268	A-3208-379-A	CHASSIS (S) ASSY, MECHANISM	

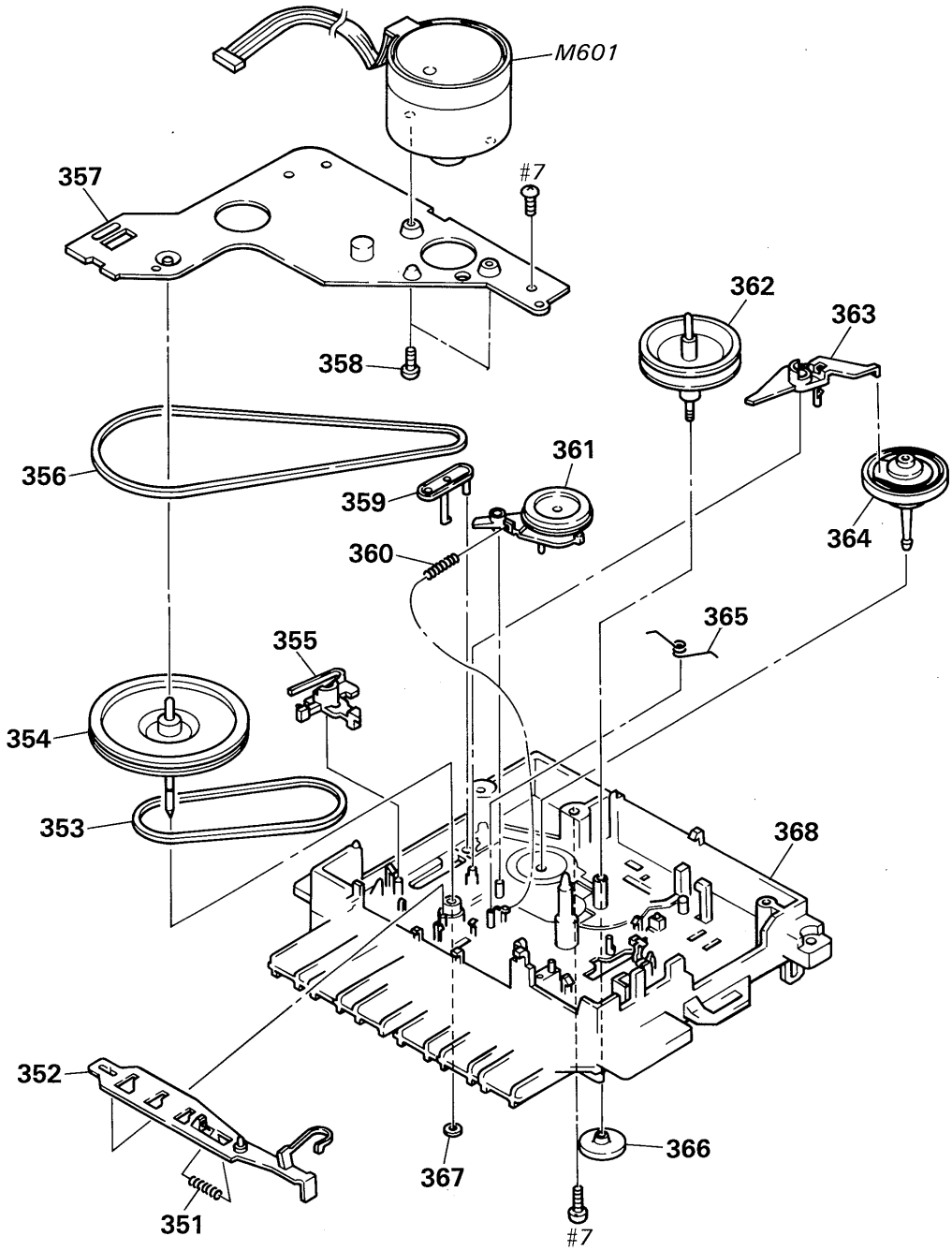
7-7. MECHANISM DECK SECTION-3 (CFD-250)
(DECK B : MF-250-64)



Ref. No.	Part No.	Description	Remark
301	4-932-695-01	SLIDER (FR), LOCK	
302	4-932-656-01	SPRING, COMPRESSION	
303	4-928-994-01	LEVER, PAUSE	
304	4-928-993-01	LEVER, FF	
305	4-928-992-01	LEVER, REW	
306	4-928-991-01	LEVER, PLAY	
307	4-934-511-11	LEVER (S), REC	
308	4-928-985-01	LEVER, STOP	
309	4-936-206-01	SLIDER (S), EJECT	
310	4-932-648-01	SPRING, COMPRESSION	
311	4-928-973-01	SPRING	
312	4-928-972-01	SPRING, TENSION	
313	3-313-372-01	SPRING, TENSION	
314	4-928-998-01	DECK (S), HEAD	

Ref. No.	Part No.	Description	Remark
315	4-928-962-01	PINCH ROLLER	
316	4-928-982-01	LEVER (C)	
317	X-4920-347-1	LEVER (S) ASSY, FR	
318	4-928-978-01	GEAR (C), SUPPLY REEL	
319	4-931-795-11	WASHER	
320	3-343-381-01	SPRING, COMPRESSION	
321	3-343-285-01	GEAR, FF	
322	X-4920-350-1	GEAR (S) ASSY, T REEL	
323	4-928-957-01	RETAINER, CASSETTE	
324	4-928-960-02	CLAW, SAFETY	
325	4-928-976-01	LEVER, SW	
HE101	1-543-525-11	HEAD, MAGNETIC (ERASE)	
HRP101	1-543-628-11	HEAD, MAGNETIC (REC/PB)	

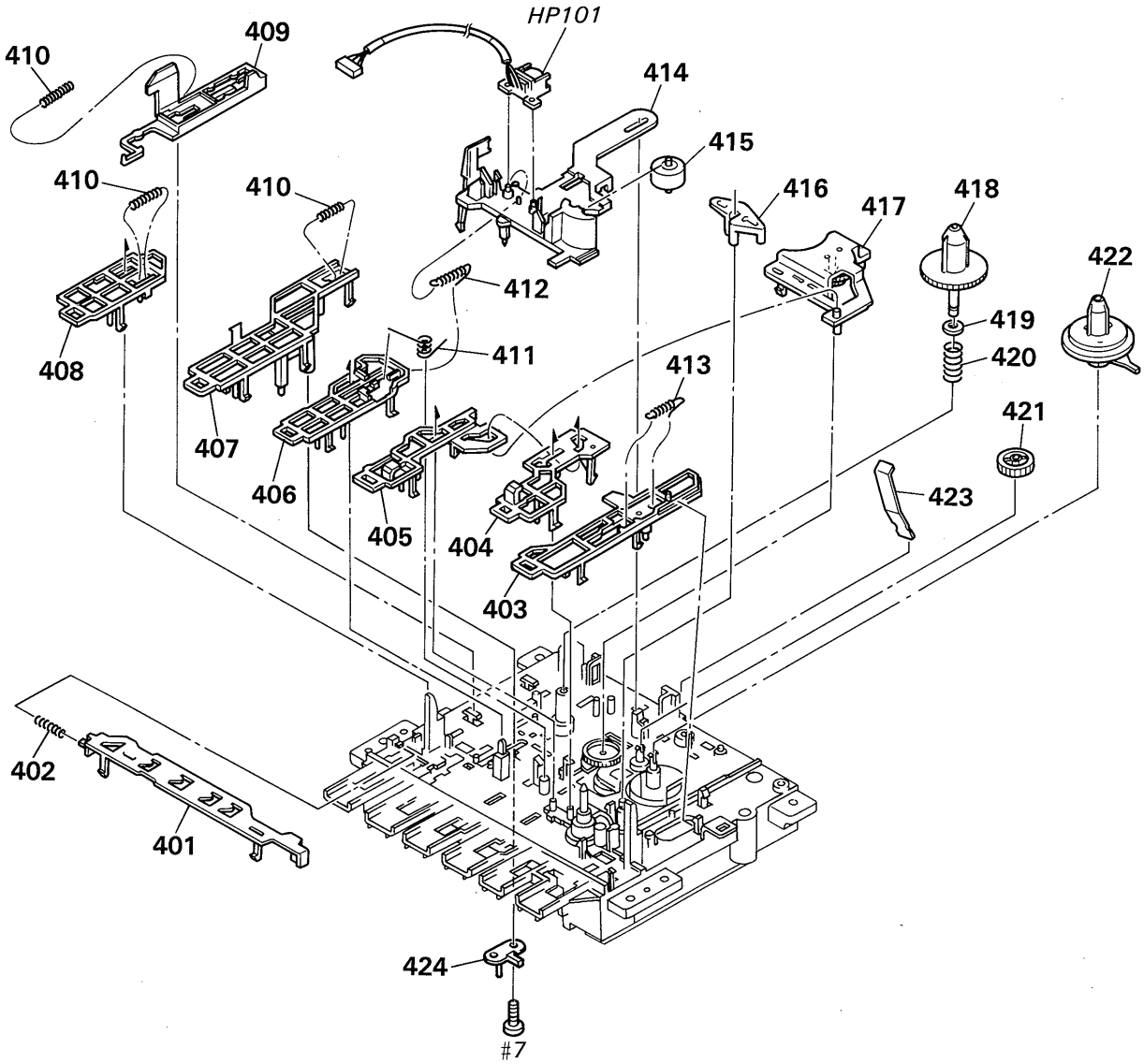
7-8. MECHANISM DECK SECTION-4 (CFD-250)
(DECK B : MF-250-64)



Ref. No.	Part No.	Description	Remark
351	4-932-656-01	SPRING, COMPRESSION	
352	4-928-996-01	LEVER, SW	
353	4-928-974-01	BELT (MIDWAY)	
354	X-4920-923-1	WHEEL (W) ASSY, CAPSTAN	
355	4-928-987-01	LEVER (T), SHUT-OFF	
356	4-934-521-01	BELT	
357	X-4920-921-1	PLATE (W) ASSY, GROUND	
358	3-343-251-01	SCREW (M2.6X2.5)	
359	4-928-961-01	PLATE, PAUSE LOCK	
360	4-932-655-01	SPRING, COMPRESSION	

Ref. No.	Part No.	Description	Remark
361	X-4920-346-2	LEVER (S) ASSY, IDLER	
362	X-4920-922-1	PULLEY (W) ASSY, FR	
363	4-928-986-01	LEVER (S), SHUT-OFF	
364	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
365	4-928-958-01	SPRING, FR RETURN	
366	4-928-967-01	GEAR (C), MIDWAY	
367	3-343-358-01	RING, RETAINING	
368	A-3208-379-A	CHASSIS (S) ASSY, MECHANISM	
M601	X-4920-924-1	MOTOR ASSY (REEL/CAPSTAN)	

7-9. MECHANISM DECK SECTION-5 (CFD-260)
(DECK A : MF-260-64PB)

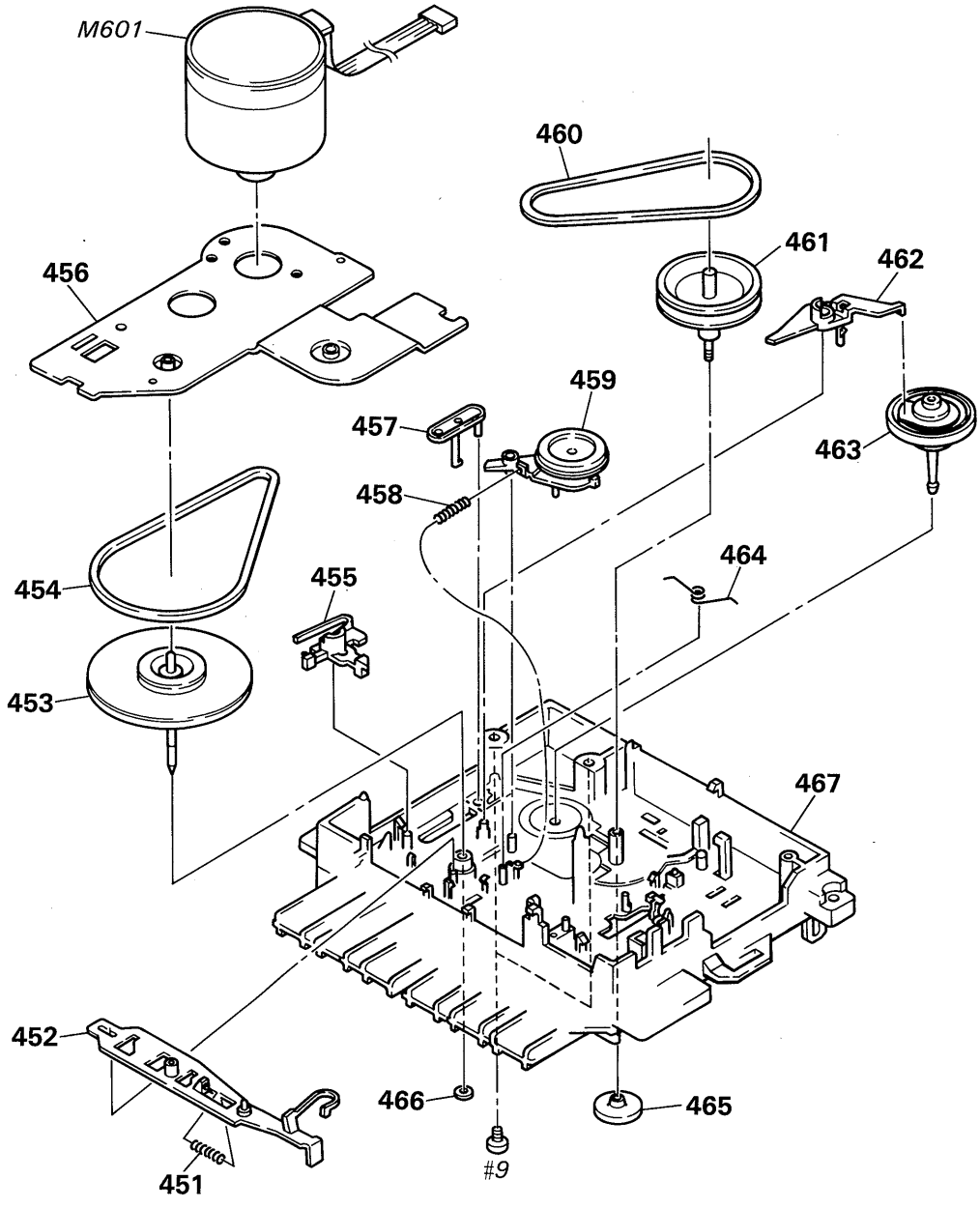


Ref. No.	Part No.	Description	Remark
401	4-932-695-01	SLIDER (FR), LOCK	
402	4-932-656-01	SPRING, COMPRESSION	
403	4-928-994-01	LEVER, PAUSE	
404	4-928-993-01	LEVER, FF	
405	4-928-992-01	LEVER, REW	
406	4-928-991-01	LEVER, PLAY	
407	4-921-195-01	LEVER (AC), REC	
408	4-928-985-01	LEVER, STOP	
409	4-936-206-01	SLIDER (S), EJECT	
410	4-932-648-01	SPRING, COMPRESSION	
411	4-928-973-01	SPRING	
412	4-928-972-01	SPRING, TENSION	
413	3-313-372-01	SPRING, TENSION	

Ref. No.	Part No.	Description	Remark
414	4-928-998-01	DECK (S), HEAD	
415	4-928-962-01	PINCH ROLLER	
416	4-928-982-01	LEVER (C)	
417	X-4920-347-1	LEVER (S) ASSY, FR	
418	4-928-978-01	GEAR (C), SUPPLY REEL	
419	4-931-795-11	WASHER	
420	3-343-381-01	SPRING, COMPRESSION	
421	3-343-285-01	GEAR, FF	
422	X-4920-350-1	GEAR (S) ASSY, T REEL	
423	4-928-957-01	RETAINER, CASSETTE	
424	4-928-976-01	LEVER, SW	
HP101	1-543-714-11	HEAD, MAGNETIC (PB)	

SEE ADDITIONAL INFORMATION

7-10. MECHANISM DECK SECTION-6 (CFD-260) (DECK A : MF-260-64PB)

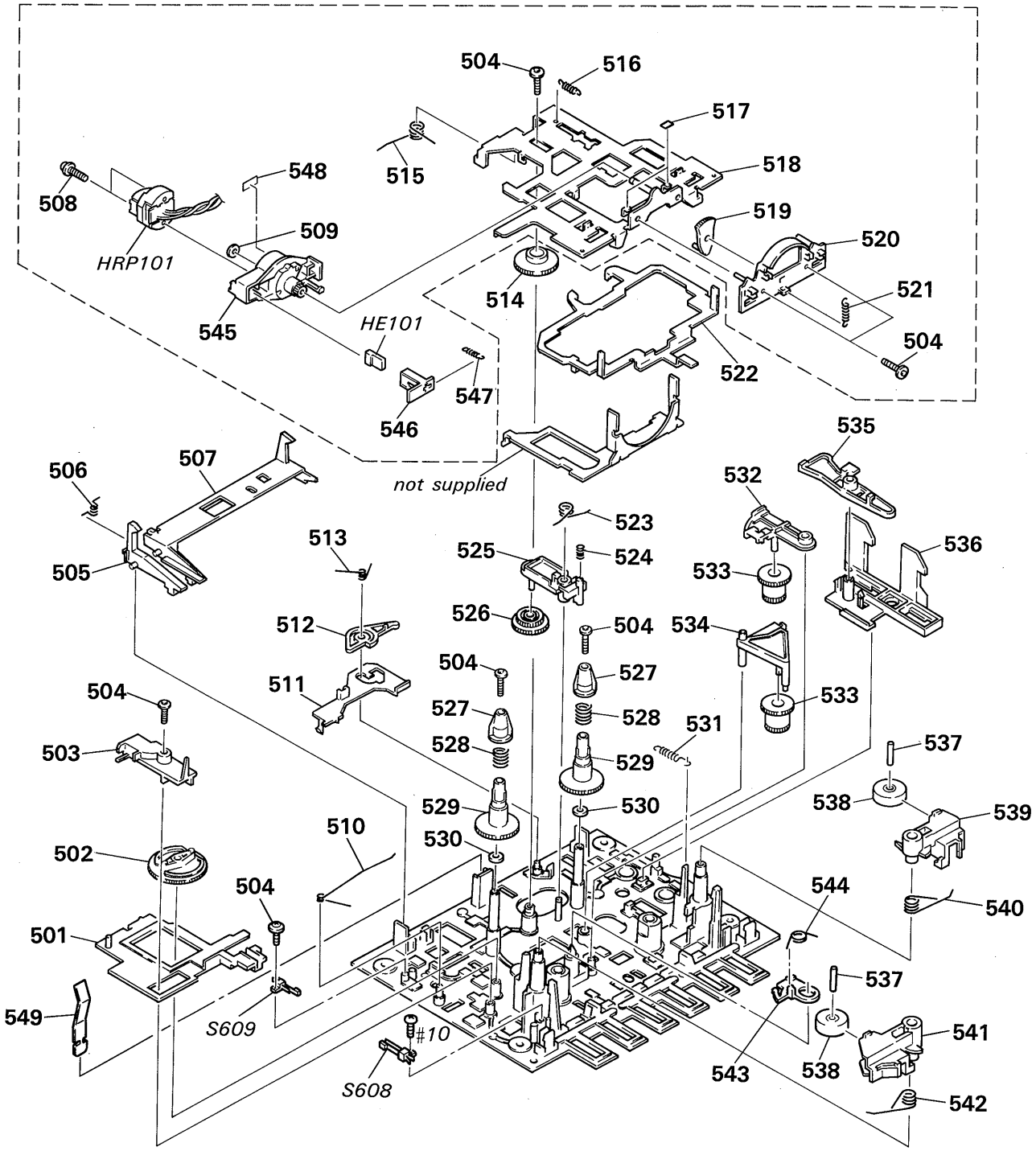


Ref. No.	Part No.	Description	Remark
451	4-932-656-01	SPRING, COMPRESSION	
452	4-928-996-01	LEVER, SW	
453	X-4920-349-1	WHEEL (S) ASSY, CAPSTAN	
454	3-453-112-00	BELT (CAPSTAN)	
455	4-928-987-01	LEVER (T), SHUT-OFF	
* 456	X-4918-598-1	PLATE ASSY, GROUND	
457	4-928-961-01	PLATE, PAUSE LOCK	
458	4-932-655-01	SPRING, COMPRESSION	
459	X-4920-346-2	LEVER (S) ASSY, IDLER	

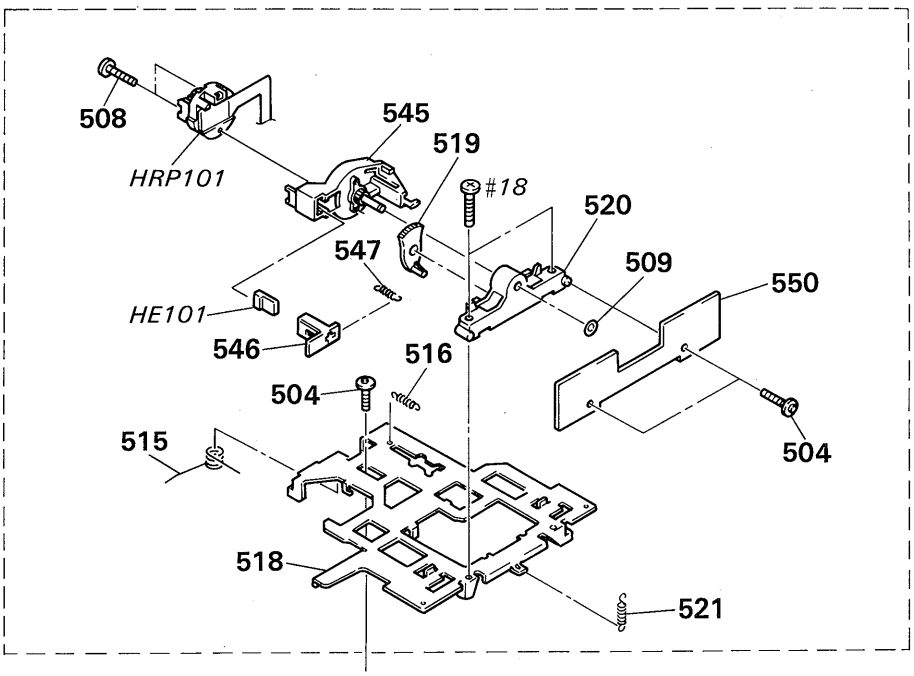
Ref. No.	Part No.	Description	Remark
460	4-928-974-01	BELT (MIDWAY)	
461	X-4918-580-1	PULLEY ASSY, FR	
462	4-928-986-01	LEVER (S), SHUT-OFF	
463	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	
464	4-928-958-01	SPRING, FR RETURN	
465	4-928-967-01	GEAR (C), MIDWAY	
466	3-343-358-01	RING, RETAINING	
467	A-3208-379-A	CHASSIS (S) ASSY, MECHANISM	
M601	X-3366-404-1	MOTOR ASSY (REEL/CAPSTAN)	

7-11. MECHANISM DECK SECTION-7 (CFD-260) (DECK B : MF-260-102)

FORMER TYPE



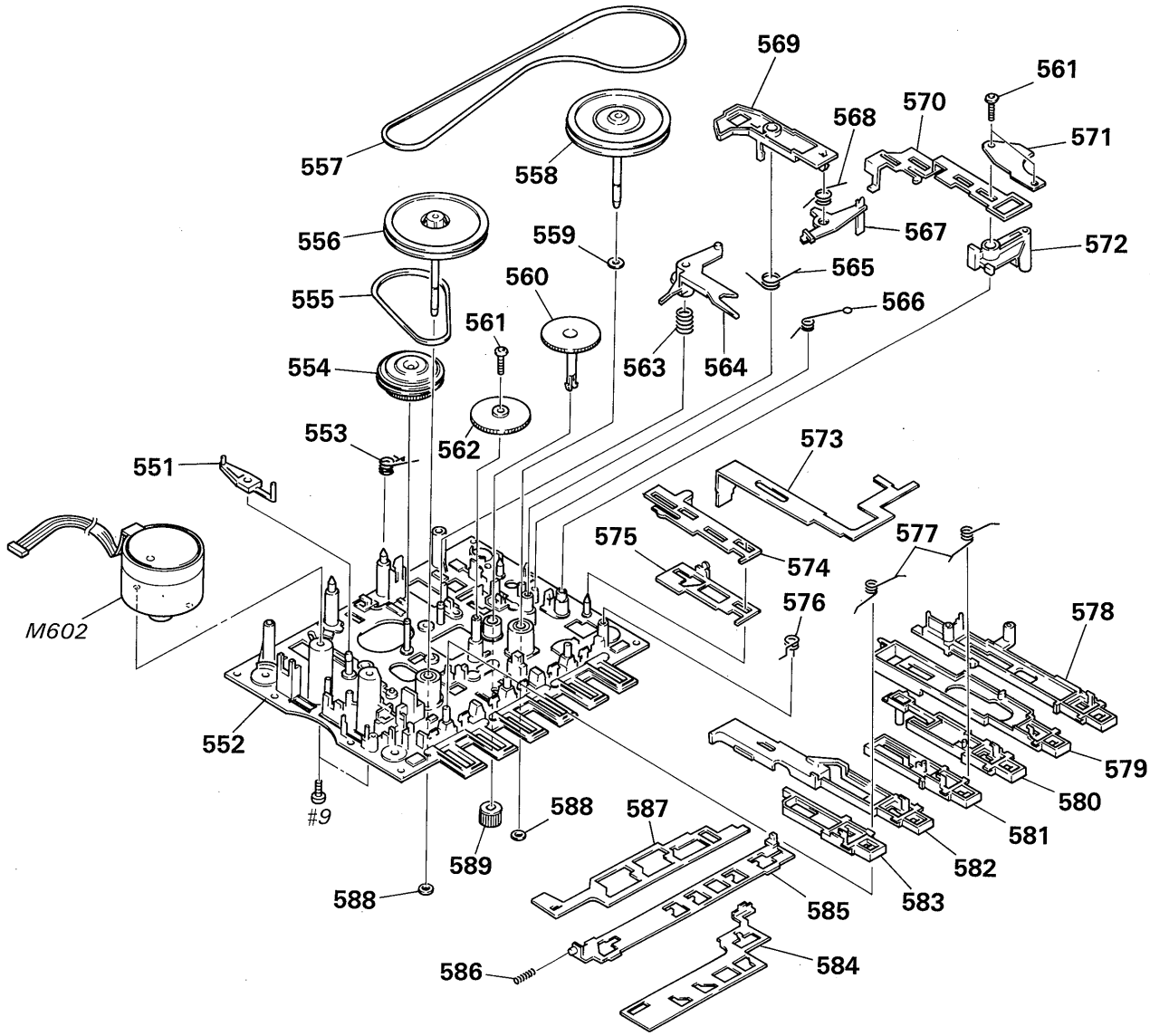
NEW TYPE



Ref. No.	Part No.	Description	Remark
501	3-374-364-01	SLIDER (NR)	
502	3-374-365-01	GEAR (NR), CAM	
503	3-374-330-01	LEVER (DIR A)	
504	3-344-737-11	SCREW (B1.4X6), TAPPING	
505	3-374-335-01	LEVER (ERASE N)	
506	4-930-451-01	SPRING	
507	3-374-366-01	LEVER (ERASE R)	
508	3-309-597-81	SCREW (1.4), TAPPING	
509	3-336-319-01	RING, RETAINING	(FORMER TYPE)
509	3-328-432-01	WASHER, STOPPER	(NEW TYPE)
510	3-374-331-01	SPRING (DIR), TORSION	
511	3-374-332-01	SLIDER (BRAKE)	
512	3-374-333-01	LEVER (PAUSE)	
513	3-374-334-01	SPRING (BRAKE), TORSION	
514	3-374-329-01	GEAR, MIDWAY	
515	3-374-342-01	SPRING (HEAD), TORSION	
516	3-380-814-01	SPRING, TENSION	
* 517	3-377-197-01	SHEET (AZ) (T=0.09)	(FORMER TYPE)
* 517	3-377-197-11	SHEET (AZ) (T=0.115)	(FORMER TYPE)
* 517	3-377-197-21	SHEET (AZ) (T=0.14)	(FORMER TYPE)
* 517	3-377-197-31	SHEET (AZ) (T=0.165)	(FORMER TYPE)
* 517	3-377-197-41	SHEET (AZ) (T=0.23)	(FORMER TYPE)
* 518	X-3363-914-1	CHASSIS ASSY, HEAD	(FORMER TYPE)
* 518	3-381-657-01	CHASSIS, HEAD	(NEW TYPE)
519	3-374-343-01	LEVER (FAN TYPE)	(FORMER TYPE)
519	3-381-660-01	LEVER (FAN-SHAPED)	(NEW TYPE)
520	3-374-369-01	GEAR (BASE), HEAD	(FORMER TYPE)
* 520	3-381-658-01	GEAR (BASE), HEAD	(NEW TYPE)
521	3-386-829-01	SPRING TENSION	
* 522	3-374-370-01	SLIDER (HD)	
523	3-374-327-01	SPRING (N R), TORSION	
524	3-343-264-81	COLLAR, SPRING	

Ref. No.	Part No.	Description	Remark
525	3-374-363-01	LEVER (FWD)	
526	3-374-328-01	GEAR, FWD	
527	4-930-408-11	CLAW, REEL	
528	4-931-747-11	SPRING, COMPRESSION	
529	3-374-326-01	TABLE, REEL	
530	3-377-195-01	WASHER (S)	
531	3-377-194-01	SPRING, TENSION	
532	3-374-338-01	LEVER (REW)	
533	3-374-339-01	GEAR, FR	
534	3-374-368-01	LEVER (FF)	
535	3-374-336-01	LEVER (SW)	
* 536	3-374-367-01	LEVER (EJECT)	
537	3-366-052-11	SHAFT, PINCH ROLLER	
538	3-366-051-11	PINCH ROLLER	
* 539	3-374-372-01	LEVER (PINCH N)	
540	3-374-346-01	SPRING (N), TORSION	
* 541	3-374-373-01	LEVER (PINCH R)	
542	3-374-347-01	SPRING (R), TORSION	
543	3-374-340-01	LEVER (TIMER)	
544	3-374-341-01	SPRING (TIMER), TORSION	
545	3-374-371-01	HOLDER, HEAD	(FORMER TYPE)
545	X-3365-422-1	HOLDER ASSY, HEAD	(NEW TYPE)
546	3-374-344-01	GUIDE, EH	
547	3-374-345-01	SPRING, TENSION	
548	3-831-441-XX	CUSHION, STOPPER	
549	3-376-135-01	SPRING, CASSETTE	
* 550	1-645-055-13	HEAD RELAY BOARD	(NEW TYPE)
HE101	1-543-719-11	HEAD, MAGNETIC	(ERASE)
HRP101	1-500-013-11	HEAD MAGNETIC (REC/PB) (WITH FLEXBLE BOARD)	(NEW TYPE)
HRP101	1-543-872-11	HEAD, MAGNETIC (REC/PB)	(FORMER TYPE)
S608	1-570-559-11	LEAF SWITCH (DIR)	
S609	1-571-348-11	LEAF SWITCH (F/R)	

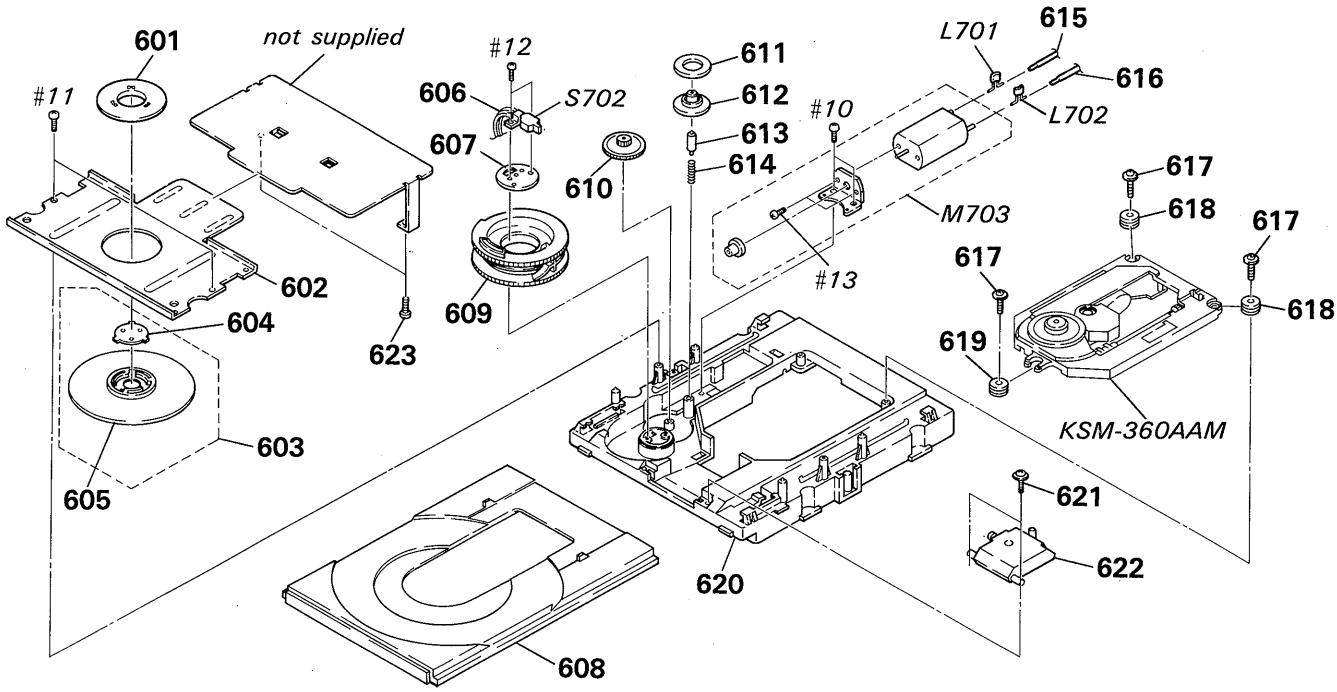
7-12. MECHANISM DECK SECTION-8 (CFD-260)
(DECK B : MF-260-102)



Ref. No.	Part No.	Description	Remark
551	3-374-304-01	LEVER (PAUSE ROCK)	
* 552	X-3363-918-1	CHASSIS ASSY, MECHANICAL	
553	3-374-310-01	SPRING (FWD), TORSION	
554	X-3363-917-1	LIMITER ASSY, FWD	
555	3-374-321-01	BELT	
556	X-3365-411-1	FLY ASSY (N2)	
557	3-374-323-01	BELT	
558	X-3363-913-1	FLY ASSY (R)	
559	3-683-454-01	WASHER, POLYETHYLENE	
560	3-374-318-01	GEAR (A), DECELERATION	
561	3-344-737-11	SCREW (B1.4X6), TAPPING	
562	3-374-359-01	GEAR (S OFF), CAM	
563	3-375-011-01	SPRING, COMPRESSION	
* 564	3-374-316-01	LEVER (S OFF A)	
565	3-374-313-01	SPRING (S OFF), TORSION	
566	3-374-307-01	SPRING (MUTUAL), TORSION	
567	3-374-312-01	LEVER (S OFF B)	
568	3-374-311-01	SPRING (S OFF C), TORSION	
569	3-374-357-01	LEVER (S OFF C)	
570	3-374-358-01	SLIDER (ERASING)	

Ref. No.	Part No.	Description	Remark
* 571	3-374-317-01	REINFORCEMENT	
572	3-374-314-01	LEVER (DIR B)	
* 573	3-374-315-01	SLIDER (CR)	
574	3-374-306-01	SLIDER (MODE B)	
* 575	3-374-305-01	SLIDER (MODE A)	
576	3-374-309-01	SPRING (REC), TORSION	
577	3-374-308-01	SPRING (CONTROL), TORSION	
578	3-374-356-01	SLIDER (REC)	
579	3-374-355-01	SLIDER (FWD)	
580	3-374-354-01	SLIDER (REW)	
581	3-374-353-01	SLIDER (FF)	
582	3-374-352-01	SLIDER (PAUSE)	
583	3-374-351-01	SLIDER (STOP)	
* 584	3-374-348-01	SLIDER (FR)	
585	3-374-350-01	SLIDER (LOCK)	
586	4-932-648-01	SPRING, COMPRESSION	
* 587	3-374-349-01	SLIDER (SW)	
588	3-374-324-01	RING, RETAINING	
589	3-374-325-01	GEAR (B), DECELERATION	
M602	A-3253-408-A	MOTOR ASSY (9F) (REEL/CAPSTAN)	

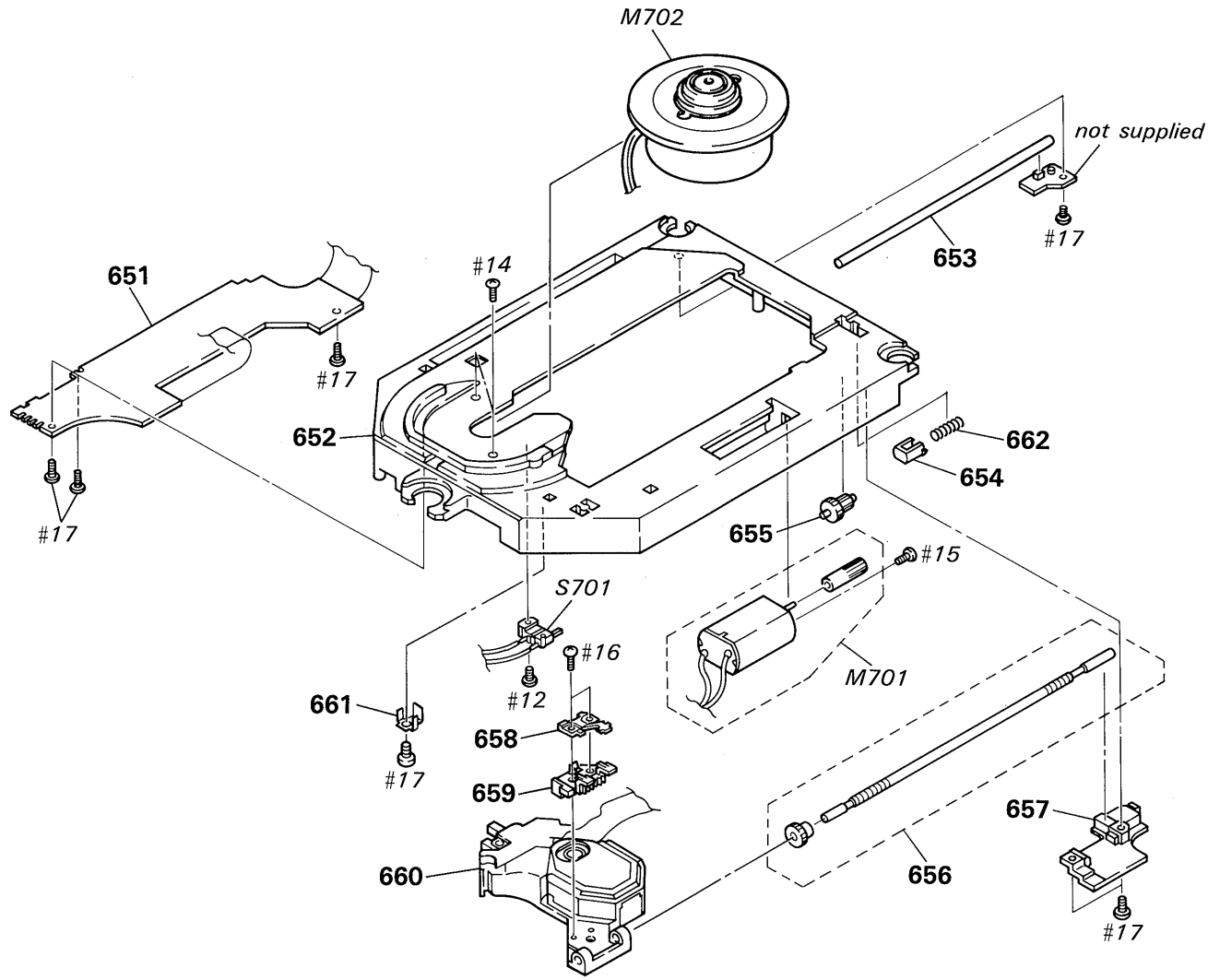
7-13. CD CHASSIS SECTION (KSL-360AAM)



Ref. No.	Part No.	Description	Remark
* 601	2-625-934-01	PULLEY (B), CHUCKING	
* 602	2-625-932-01	CHASSIS, CHUCK	
603	X-2625-355-1	CHUCKING (A) ASSY (RP)	
* 604	2-625-923-01	PLATE, PULLEY	
* 605	2-625-933-02	PULLEY (A), CHUCKING	
606	1-949-833-11	HARNESS (SW (K))	
* 607	2-625-920-01	SWITCH (BASE), LEAF	
608	2-625-936-01	TRAY	
609	2-625-931-01	GEAR, CONTROL	
610	2-625-925-01	GEAR (B)	
611	2-625-865-01	RING, RUBBER	
612	2-625-926-01	GEAR (A)	
613	2-625-927-01	SHAFT, SPRING	
614	2-625-928-01	SPRING, COMPRESSION	

Ref. No.	Part No.	Description	Remark
615	1-949-834-21	HARNESS (D)	
616	1-949-834-11	HARNESS (D)	
617	2-625-922-01	SCREW (2X6), + PTPWH	
618	2-625-864-11	INSULATOR	
619	2-625-864-01	INSULATOR	
* 620	2-625-935-01	CHASSIS, LU	
621	2-626-294-11	SCREW (+ PTPWH) (2.6X7)	
* 622	2-625-930-01	LIFTER	
623	4-931-757-41	SCREW (DIA.2.6X10) (IT3B)	
L701	1-410-678-31	MICRO INDUCTOR (220uH)	
L702	1-410-678-31	MICRO INDUCTOR (220uH)	
M703	X-2625-350-1	MOTOR ASSY, LOADING	
S702	1-692-053-11	SWITCH, LEAF (LOAD IN/OUT)	

7-14. OPTICAL PICKUP SECTION (KSM-360AAM)



The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
651	1-643-074-12	TRANSLATION BOARD	
* 652	2-625-949-01	CHASSIS (80), MD	
* 653	2-625-943-01	SHAFT (80), GUIDE	
* 654	2-625-941-01	RETAINER (80), THRUST	
655	2-625-944-01	GEAR (B80)	
656	X-2625-351-1	SCREW (80) ASSY, SLED	
* 657	2-625-945-01	PLATE (80), FIXED	
658	2-626-098-01	RACK (80)	
659	2-626-099-01	RACK (80) (J)	
⚠660	8-848-246-01	PICKUP, OPTICAL KSS-360A	
* 661	2-625-946-01	SPRING (80), SLED	
662	2-640-618-01	SPRING, COMPRESSION	
M701	X-2625-352-1	MOTOR ASSY, SLED	
M702	X-2625-354-1	MOTOR ASSY, SPINDLE	
S701	1-570-771-21	SWITCH (LIMIT)	

SECTION 8
ELECTRICAL PARTS LIST

BATTERY (L) | BATTERY (S) | CD

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH
- Abbreviations
  CND:Canadian model
  AUS:Australian model
  E=E94:Taiwan model

Ref. No.	Part No.	Description			Remark
*	1-644-444-11	BATTERY (L) BOARD			
		**********			
	4-938-730-01	SPRING (A), BATTERY			
		< CONNECTOR >			
* CN903	1-506-680-11	PLUG, CONNECTOR (2.5MM) 3P			
**********					
*	1-644-434-11	BATTERY (S) BOARD			
		**********			
	4-938-731-01	SPRING (B), BATTERY			
**********					
*	A-3262-571-A	CD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C701	1-163-205-00	CERAMIC CHIP	0.001uF	5%	50V
C702	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C703	1-135-162-21	TANTALUM CHIP	33uF	20%	6.3V
C704	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C705	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C706	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C707	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C708	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C709	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C710	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C711	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C712	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V
C714	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C715	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C716	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C717	1-164-343-11	CERAMIC CHIP	0.056uF	10%	25V
C718	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C719	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C720	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C721	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C722	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C724	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C725	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V
C726	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C727	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C728	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C729	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C730	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C732	1-163-012-00	CERAMIC CHIP	0.0018uF	10%	50V
C733	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C734	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C735	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C736	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C737	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C738	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C739	1-162-637-11	CERAMIC CHIP	0.47uF		16V
C740	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C742	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C743	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C745	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C746	1-162-282-31	CERAMIC	100PF	10%	50V
C747	1-162-282-31	CERAMIC	100PF	10%	50V
C748	1-162-282-31	CERAMIC	100PF	10%	50V
C749	1-162-282-31	CERAMIC	100PF	10%	50V
C751	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C752	1-128-393-11	ELECT	100uF	20%	10V
C753	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C754	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C755	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C756	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V

Ref. No.	Part No.	Description			Remark
C757	1-163-222-11	CERAMIC CHIP	5PF	0.25PF	50V
C758	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C759	1-124-635-00	ELECT	220uF	20%	6.3V
C760	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C761	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C762	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C763	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C764	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C765	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C766	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V
C769	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C770	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C771	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C772	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C773	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C774	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C775	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C776	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V
C781	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C782	1-128-393-11	ELECT	100uF	20%	10V
C783	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C784	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C785	1-124-455-00	ELECT	100uF	20%	16V
C786	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C787	1-124-635-00	ELECT	220uF	20%	6.3V
C788	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C789	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C790	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C791	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C792	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C793	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C794	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C795	1-162-306-11	CERAMIC	0.01uF	20%	16V
C796	1-162-294-31	CERAMIC	0.001uF	10%	50V
C797	1-162-294-31	CERAMIC	0.001uF	10%	50V
C799	1-162-306-11	CERAMIC	0.01uF	20%	16V

< CONNECTOR >

* CN701	1-691-777-11	HOUSING, CONNECTOR 29P	
CN702	1-563-627-11	CONNECTOR, FLEXIBLE 24P	

< DIODE >

D701	8-719-404-46	DIODE	MA110
D702	8-719-404-46	DIODE	MA110
D703	8-719-404-46	DIODE	MA110
D704	8-719-404-46	DIODE	MA110
D705	8-719-404-46	DIODE	MA110
D706	8-719-404-46	DIODE	MA110

Ref. No.	Part No.	Description				Remark
		< IC >				
IC701	8-752-059-30	IC	CXA1610M			
IC702	8-752-058-77	IC	CXA1372AQ			
IC703	8-752-352-93	IC	CXD2500BQ			
IC704	8-759-518-59	IC	BA6296FP			
IC705	8-759-962-08	IC	BA6208			
IC706	8-759-071-77	IC	SM5870DS-ET			
IC707	8-759-710-55	IC	NJM2100M			
IC708	8-759-710-55	IC	NJM2100M			
IC710	8-759-948-48	IC	RH5RA50A			
		< JUMPER RESISTOR >				
JR701	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR702	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR703	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR704	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR705	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR706	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR707	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR708	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR709	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR710	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR711	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR712	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR713	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR714	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR715	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR716	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR717	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR718	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR719	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR720	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR721	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR722	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR724	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR725	1-249-997-11	CARBON MELF	0	5%	1/8W	
JR726	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR727	1-249-366-11	CARBON MELF	0	5%	1/5W	
JR728	1-249-366-11	CARBON MELF	0	5%	1/5W	
		< COIL >				
L701	1-410-381-11	INDUCTOR CHIP	10uH			
L703	1-410-381-11	INDUCTOR CHIP	10uH			
L704	1-410-737-31	INDUCTOR CHIP	0.47uH			
		< IC LINK >				
PS701	1-576-259-11	RINK, IC				

CD

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q701	8-729-101-07	TRANSISTOR	2SB798-DL		
Q702	8-729-901-46	TRANSISTOR	DTA114YK		
Q703	8-729-101-07	TRANSISTOR	2SB798-DL		
Q704	8-729-900-52	TRANSISTOR	DTC114YK		
Q705	8-729-920-31	TRANSISTOR	DTC343TK		
Q706	8-729-920-31	TRANSISTOR	DTC343TK		
Q707	8-729-902-XX	TRANSISTOR	DTC114TK-T147		
Q708	8-729-902-XX	TRANSISTOR	DTC114TK-T147		
Q709	8-729-901-46	TRANSISTOR	DTA114YK		
Q710	8-729-901-01	TRANSISTOR	DTC144EK		
Q711	8-729-901-01	TRANSISTOR	DTC144EK		
Q712	8-729-900-52	TRANSISTOR	DTC114YK		
Q713	8-729-900-52	TRANSISTOR	DTC114YK		
Q715	8-729-140-75	TRANSISTOR	2SD999-CLCK		
		< RESISTOR >			
R701	1-249-395-11	CARBON	15	5%	1/4W
R702	1-216-001-00	METAL CHIP	10	5%	1/10W
R703	1-249-350-11	CARBON MELF	18K	5%	1/8W
R704	1-216-066-00	METAL CHIP	5.1K	5%	1/10W
R705	1-249-339-11	CARBON MELF	2.2K	5%	1/8W
R715	1-249-359-11	CARBON MELF	100K	5%	1/8W
R716	1-249-360-11	CARBON MELF	120K	5%	1/8W
R717	1-249-360-11	CARBON MELF	120K	5%	1/8W
R718	1-249-355-11	CARBON MELF	47K	5%	1/8W
R719	1-249-347-11	CARBON MELF	10K	5%	1/8W
R720	1-249-355-11	CARBON MELF	47K	5%	1/8W
R721	1-216-113-00	METAL CHIP	470K	5%	1/10W
R722	1-249-360-11	CARBON MELF	120K	5%	1/8W
R723	1-249-347-11	CARBON MELF	10K	5%	1/8W
R724	1-249-417-11	CARBON	1K	5%	1/4W
R725	1-249-435-11	CARBON	33K	5%	1/4W
R726	1-249-365-11	CARBON MELF	330K	5%	1/8W
R727	1-249-426-11	CARBON	5.6K	5%	1/4W
R728	1-215-417-00	METAL	680	1%	1/6W
R729	1-249-358-11	CARBON MELF	82K	5%	1/8W
R730	1-249-341-11	CARBON MELF	3.3K	5%	1/8W
R731	1-249-341-11	CARBON MELF	3.3K	5%	1/8W
R732	1-249-360-11	CARBON MELF	120K	5%	1/8W
R733	1-249-359-11	CARBON MELF	100K	5%	1/8W
R734	1-216-074-00	METAL CHIP	11K	5%	1/10W
R735	1-249-335-11	CARBON MELF	1K	5%	1/8W
R736	1-249-409-11	CARBON	220	5%	1/4W
R737	1-249-407-11	CARBON	150	5%	1/4W
R739	1-249-423-11	CARBON	3.3K	5%	1/4W
R740	1-249-351-11	CARBON MELF	22K	5%	1/8W
R745	1-249-402-11	CARBON	56	5%	1/4W

Ref. No.	Part No.	Description			Remark
R746	1-249-326-11	CARBON MELF	180	5%	1/8W
R749	1-249-347-11	CARBON MELF	10K	5%	1/8W
R750	1-216-024-00	METAL GLAZE	91	5%	1/10W
R751	1-249-352-11	CARBON MELF	27K	5%	1/8W
R752	1-249-355-11	CARBON MELF	47K	5%	1/8W
R753	1-249-355-11	CARBON MELF	47K	5%	1/8W
R754	1-249-339-11	CARBON MELF	2.2K	5%	1/8W
R756	1-249-421-11	CARBON	2.2K	5%	1/4W
R757	1-249-346-11	CARBON MELF	8.2K	5%	1/8W
R758	1-249-341-11	CARBON MELF	3.3K	5%	1/8W
R760	1-249-347-11	CARBON MELF	10K	5%	1/8W
R761	1-249-437-11	CARBON	47K	5%	1/4W
R762	1-249-347-11	CARBON MELF	10K	5%	1/8W
R763	1-249-437-11	CARBON	47K	5%	1/4W
R764	1-249-355-11	CARBON MELF	47K	5%	1/8W
R765	1-249-355-11	CARBON MELF	47K	5%	1/8W
R766	1-249-340-11	CARBON MELF	2.7K	5%	1/8W
R767	1-249-346-11	CARBON MELF	8.2K	5%	1/8W
R768	1-216-074-00	METAL CHIP	11K	5%	1/10W
R769	1-249-344-11	CARBON MELF	5.6K	5%	1/8W
R770	1-249-347-11	CARBON MELF	10K	5%	1/8W
R771	1-249-355-11	CARBON MELF	47K	5%	1/8W
R772	1-249-347-11	CARBON MELF	10K	5%	1/8W
R773	1-249-355-11	CARBON MELF	47K	5%	1/8W
R774	1-249-355-11	CARBON MELF	47K	5%	1/8W
R775	1-249-355-11	CARBON MELF	47K	5%	1/8W
R776	1-249-340-11	CARBON MELF	2.7K	5%	1/8W
R777	1-249-346-11	CARBON MELF	8.2K	5%	1/8W
R778	1-216-074-00	METAL CHIP	11K	5%	1/10W
R779	1-249-344-11	CARBON MELF	5.6K	5%	1/8W
R780	1-216-052-00	METAL CHIP	1.3K	5%	1/10W
R781	1-216-052-00	METAL CHIP	1.3K	5%	1/10W
R782	1-249-349-11	CARBON MELF	15K	5%	1/8W
R783	1-249-349-11	CARBON MELF	15K	5%	1/8W
R785	1-249-329-11	CARBON MELF	330	5%	1/8W
⚠R786	1-219-212-11	FUSIBLE	15	5%	1/8W F
R787	1-249-347-11	CARBON MELF	10K	5%	1/8W
R788	1-249-335-11	CARBON MELF	1K	5%	1/8W
R789	1-249-347-11	CARBON MELF	10K	5%	1/8W
		< CONPOSITION CIRCUIT BLOCK >			
RB701	1-236-904-11	RESISTOR, NETWORK (CHIP TYPE)			
RB702	1-239-309-11	RESISTOR ARRAY, CHIP 100K			
		< VARIABLE RESISTOR >			
RV701	1-241-632-11	RES, ADJ, CARBON 47K			
RV702	1-241-632-11	RES, ADJ, CARBON 47K			
RV703	1-241-632-11	RES, ADJ, CARBON 47K			
RV704	1-241-632-11	RES, ADJ, CARBON 47K			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remark
		< VIBRATOR >				
X701	1-579-345-11	VIBRATOR, CERAMIC 16.9344MHZ				
**********						
*	A-3262-570-A	CONTROL BOARD, COMPLETE (CFD-250)				
*	A-3262-587-A	CONTROL BOARD, COMPLETE (CFD-260)				
		**********				
*	1-644-924-11	REMOTE CONTROL BOARD				
		**********				
	3-380-566-01	HOLDER, LCD				
	4-931-757-41	SCREW (DIA.2.6X10) (IT3B)				
		< CAPACITOR >				
C801	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C802	1-124-261-00	ELECT	10uF	20%	50V	
C803	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C804	1-124-442-00	ELECT	330uF	20%	6.3V	
C805	1-162-207-31	CERAMIC	22PF	5%	50V	
C806	1-162-207-31	CERAMIC	22PF	5%	50V	
C807	1-161-494-00	CERAMIC	0.022uF		25V	
C808	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C809	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C810	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C811	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C812	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C813	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C814	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C816	1-161-494-00	CERAMIC	0.022uF		25V	
C817	1-124-034-51	ELECTIC	33uF	20%	16V	(CFD-260)
C818	1-162-282-31	CERAMIC	100PF	10%	50V	
C826	1-161-494-00	CERAMIC	0.022uF		25V	(EXCEPT AUS)
C827	1-162-294-31	CERAMIC	0.001uF	10%	50V	
		< CONNECTOR >				
* CN801	1-691-609-11	HOUSING, CONNECTOR (PC BOARD)				
CN802	1-580-368-11	HOUSING, CONNECTOR (PC BOARD) 12P				
* CN803	1-506-509-11	PIN, CONNECTOR 4P				
* CN805	1-506-509-11	PIN, CONNECTOR 4P				
		< CONNECTOR >				
CNP803	1-562-087-00	SOCKET, CONNECTOR 4P				
		< DIODE >				
D801	8-719-911-19	DIODE	1SS119			
D802	8-719-987-04	LED	SLR34VR70F-150			
D803	8-719-987-04	LED	SLR34VR70F-150			(CFD-260)
D805	8-719-987-04	LED	SLR34VR70F-150			(AUS)

Ref. No.	Part No.	Description		Remark
		< IC >		
IC801	8-752-838-61	IC	CXP50716-041Q	
IC802	8-759-076-13	IC	KIA7027P/F-TP	(CFD-250)
IC802	8-759-076-14	IC	PST572J	(CFD-260)
IC805	8-741-100-47	IC	SBX1610-09	
		< COIL >		
L801	1-410-521-11	INDUCTOR	100uH	
L802	1-410-509-11	INDUCTOR	10uH	
L808	1-410-509-11	INDUCTOR	10uH	
		< LIQUID CRYSTAL DISPLAY >		
LCD801	1-809-730-11	DISPLAY PANEL, LIQUID CRYSTAL		
		< TRANSISTOR >		
Q801	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q803	8-729-905-50	TRANSISTOR	DTC343TS	
Q804	8-729-806-30	TRANSISTOR	2SC4048	
Q805	8-729-806-30	TRANSISTOR	2SC4048	
Q806	8-729-806-30	TRANSISTOR	2SC4048	(CFD-260)
Q807	8-729-806-30	TRANSISTOR	2SC4048	(CFD-260)
		< RESISTOR >		
R801	1-249-437-11	CARBON	47K 5% 1/4W	
R802	1-249-437-11	CARBON	47K 5% 1/4W	
R803	1-249-437-11	CARBON	47K 5% 1/4W	
R804	1-249-437-11	CARBON	47K 5% 1/4W	
R805	1-249-405-11	CARBON	100 5% 1/4W	
R806	1-249-441-11	CARBON	100K 5% 1/4W	
R807	1-249-417-11	CARBON	1K 5% 1/4W	
R808	1-249-441-11	CARBON	100K 5% 1/4W	
R809	1-249-423-11	CARBON	3.3K 5% 1/4W	
R810	1-247-891-00	CARBON	330K 5% 1/4W	
R811	1-249-429-11	CARBON	10K 5% 1/4W	
R812	1-249-425-11	CARBON	4.7K 5% 1/4W	
R813	1-249-429-11	CARBON	10K 5% 1/4W	
R814	1-249-429-11	CARBON	10K 5% 1/4W	
R815	1-249-417-11	CARBON	1K 5% 1/4W	
R816	1-249-417-11	CARBON	1K 5% 1/4W	
R817	1-249-429-11	CARBON	10K 5% 1/4W	
R818	1-249-429-11	CARBON	10K 5% 1/4W	
R819	1-249-429-11	CARBON	10K 5% 1/4W	
R820	1-249-417-11	CARBON	1K 5% 1/4W	
R821	1-249-417-11	CARBON	1K 5% 1/4W	
R822	1-249-417-11	CARBON	1K 5% 1/4W	
R823	1-249-417-11	CARBON	1K 5% 1/4W	
R824	1-249-417-11	CARBON	1K 5% 1/4W	
R825	1-249-417-11	CARBON	1K 5% 1/4W	

Ref. No.	Part No.	Description				Remark
R826	1-249-417-11	CARBON	1K	5%	1/4W	
R827	1-249-417-11	CARBON	1K	5%	1/4W	
R828	1-249-417-11	CARBON	1K	5%	1/4W	
R829	1-249-425-11	CARBON	4.7K	5%	1/4W	
R830	1-249-418-11	CARBON	1.2K	5%	1/4W	
R831	1-249-420-11	CARBON	1.8K	5%	1/4W	
R832	1-249-423-11	CARBON	3.3K	5%	1/4W	
R833	1-249-428-11	CARBON	8.2K	5%	1/4W	
R834	1-249-417-11	CARBON	1K	5%	1/4W	
R835	1-249-425-11	CARBON	4.7K	5%	1/4W	
R836	1-249-418-11	CARBON	1.2K	5%	1/4W	
R837	1-249-420-11	CARBON	1.8K	5%	1/4W	
R838	1-249-423-11	CARBON	3.3K	5%	1/4W	
R839	1-249-428-11	CARBON	8.2K	5%	1/4W	
R840	1-249-417-11	CARBON	1K	5%	1/4W	
R841	1-249-425-11	CARBON	4.7K	5%	1/4W	
R842	1-249-418-11	CARBON	1.2K	5%	1/4W	
R843	1-249-420-11	CARBON	1.8K	5%	1/4W	
R844	1-249-423-11	CARBON	3.3K	5%	1/4W	
R845	1-249-428-11	CARBON	8.2K	5%	1/4W	
R846	1-249-417-11	CARBON	1K	5%	1/4W	
R847	1-249-425-11	CARBON	4.7K	5%	1/4W	
R848	1-249-418-11	CARBON	1.2K	5%	1/4W	
R849	1-249-420-11	CARBON	1.8K	5%	1/4W	
R850	1-249-423-11	CARBON	3.3K	5%	1/4W	
R851	1-249-428-11	CARBON	8.2K	5%	1/4W	
R852	1-249-425-11	CARBON	4.7K	5%	1/4W	
R853	1-249-425-11	CARBON	4.7K	5%	1/4W	
R854	1-249-431-11	CARBON	15K	5%	1/4W	
R855	1-249-433-11	CARBON	22K	5%	1/4W	
R857	1-249-420-11	CARBON	1.8K	5%	1/4W	
R859	1-249-425-11	CARBON	4.7K	5%	1/4W	
R860	1-249-418-11	CARBON	1.2K	5%	1/4W	
R861	1-249-420-11	CARBON	1.8K	5%	1/4W	
R862	1-249-430-11	CARBON	12K	5%	1/4W	
R865	1-249-418-11	CARBON	1.2K	5%	1/4W	(CFD-260)
R866	1-249-418-11	CARBON	1.2K	5%	1/4W	
R867	1-249-417-11	CARBON	1K	5%	1/4W	
R868	1-249-410-11	CARBON	270	5%	1/4W	(CFD-260)
R869	1-249-410-11	CARBON	270	5%	1/4W	
R870	1-249-417-11	CARBON	1K	5%	1/4W	
R871	1-249-429-11	CARBON	10K	5%	1/4W	
R872	1-249-429-11	CARBON	10K	5%	1/4W	
R873	1-249-429-11	CARBON	10K	5%	1/4W	
R874	1-249-441-11	CARBON	100K	5%	1/4W	
R875	1-249-441-11	CARBON	100K	5%	1/4W	
R876	1-249-410-11	CARBON	270	5%	1/4W	(AUS)
R877	1-249-410-11	CARBON	1.2K	5%	1/4W	(AUS)
R878	1-249-441-11	CARBON	100K	5%	1/4W	
R879	1-249-441-11	CARBON	100K	5%	1/4W	
R880	1-249-417-11	CARBON	1K	5%	1/4W	
R881	1-249-417-11	CARBON	1K	5%	1/4W	
R882	1-249-437-11	CARBON	47K	5%	1/4W	

< SWITCH >

S801	1-572-199-11	SWITCH, KEY BOARD (VOL-)
S802	1-572-199-11	SWITCH, KEY BOARD (⏮)
S803	1-572-199-11	SWITCH, KEY BOARD (⏭)
S804	1-572-199-11	SWITCH, KEY BOARD (TUN-)
S805	1-572-199-11	SWITCH, KEY BOARD (TUN-)
S806	1-572-199-11	SWITCH, KEY BOARD (VOL+)
S807	1-572-199-11	SWITCH, KEY BOARD (BAND)
S808	1-572-199-11	SWITCH, KEY BOARD (RESET)
S809	1-572-199-11	SWITCH, KEY BOARD (ENT/MEN)
S810	1-572-199-11	SWITCH, KEY BOARD (SOUND)
S811	1-572-199-11	SWITCH, KEY BOARD (□)
S812	1-572-199-11	SWITCH, KEY BOARD (▶II)
S813	1-572-199-11	SWITCH, KEY BOARD (MODE)
S814	1-572-199-11	SWITCH, KEY BOARD (EDIT)
S816	1-572-199-11	SWITCH, KEY BOARD (POWER)
S817	1-572-199-11	SWITCH, KEY BOARD (CLOCK)
S818	1-572-199-11	SWITCH, KEY BOARD (TIMER)
S819	1-572-199-11	SWITCH, KEY BOARD (STAND BY)
S820	1-572-199-11	SWITCH, KEY BOARD (SLEEP)
S824	1-572-199-11	SWITCH, KEY BOARD (CD)
S825	1-572-199-11	SWITCH, KEY BOARD (TAPE)
S826	1-572-199-11	SWITCH, KEY BOARD (RADIO)
S827	1-572-199-11	SWITCH, KEY BOARD (AUX)

< VIBRATOR >

X801	1-567-775-11	VIBRATOR, CERAMIC 4.19MHZ
X802	1-567-098-00	OSCILLATOR, CRYSTAL 32.768KMHZ

****

* 1-645-055-11 HEAD RELAY BOARD (CFD-260:NEW TYPE)

****

< CONNECTOR >

CN1	1-566-004-11	PIN, CONNECTOR 7P
CN2	1-566-004-11	HOUSING, CONNECTOR 7P

****

* 1-644-431-11 H/P BOARD

****

< CONNECTOR >

* CNP314 1-565-481-11 CONNECTOR, BOARD TO BOARD 5P

Ref. No.	Part No.	Description				Remark
		< JACK >				
J302	1-568-267-11	JACK (HEAD PHONE)				
		< COIL >				
L314	1-410-521-11	INDUCTOR	100uH			
		< RESISTOR >				
R149	1-249-406-11	CARBON	120	5%	1/4W F	
R249	1-249-406-11	CARBON	120	5%	1/4W F	
**********						
*	1-644-440-11	LEAF (45) BOARD				(CFD-250)
		**********				
		< CONNECTOR >				
CN607	1-562-087-00	SOCKET, CONNECTOR 4P				
**********						
*	1-644-441-11	LEAF (70) BOARD				(CFD-260)
		**********				
		< CONNECTOR >				
* CN606	1-561-651-00	SOCKET, CONNECTOR 7P				
* CN608	1-566-779-11	SOCKET, CONNECTOR (PC BOARD) 4P				
		< SWITCH >				
S605	1-571-890-11	SWITCH, LEAF				(CFD-260)
S606	1-571-890-11	SWITCH, LEAF				(CFD-260)
S607	1-571-890-11	SWITCH, LEAF				(CFD-260)
S608	1-571-890-11	SWITCH, LEAF				(CFD-260)
**********						
*	A-3262-562-A	MAIN BOARD, COMPLETE				(EXCEPT AUS)
*	A-3262-982-A	MAIN BOARD, COMPLETE				(AUS)
		**********				
	7-685-647-79	SCREW +BVTP	3X10 TYPE2 N-S			
		< CAPACITOR >				
C101	1-162-291-31	CERAMIC	560PF	10%	50V	
C102	1-162-291-31	CERAMIC	560PF	10%	50V	
C103	1-162-286-31	CERAMIC	220PF	10%	50V	
C104	1-162-286-31	CERAMIC	220PF	10%	50V	
C105	1-130-486-00	MYLAR	0.018uF	10%	50V	
C106	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C106	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C107	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C108	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C109	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C110	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C110	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C111	1-124-903-11	ELECT	1uF	20%	50V	
C112	1-124-903-11	ELECT	1uF	20%	50V	
C114	1-124-903-11	ELECT	1uF	20%	50V	
C115	1-161-375-00	CERAMIC	0.0022uF	20%	50V	
C116	1-162-286-31	CERAMIC	220PF	10%	50V	
C117	1-162-286-31	CERAMIC	220PF	10%	50V	
C119	1-162-282-31	CERAMIC	100PF	10%	50V	
C121	1-124-927-11	ELECT	4.7uF	20%	100V	
C122	1-124-927-11	ELECT	4.7uF	20%	100V	
C123	1-124-925-11	ELECT	2.2uF	20%	100V	
C124	1-162-282-31	CERAMIC	100PF	10%	50V	
C125	1-124-902-00	ELECT	0.47uF	20%	50V	
C126	1-161-053-00	CERAMIC	0.015uF	10%	50V	
C127	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C129	1-162-282-31	CERAMIC	100PF	10%	50V	
C131	1-126-233-11	ELECT	22uF	20%	50V	
C132	1-162-282-31	CERAMIC	100PF	10%	50V	
C133	1-161-772-11	CERAMIC	0.1uF	10%	25V	
C134	1-161-377-00	CERAMIC	0.0047uF	30%	16V	
C135	1-124-902-00	ELECT	0.47uF	20%	50V	
C136	1-124-927-11	ELECT	4.7uF	20%	100V	
C137	1-124-927-11	ELECT	4.7uF	20%	100V	
C138	1-124-902-00	ELECT	0.47uF	20%	50V	
C140	1-136-173-00	FILM	0.47uF	5%	50V	
C141	1-162-282-31	CERAMIC	100PF	10%	50V	
C142	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C142	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C143	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C143	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C144	1-124-360-00	ELECT	1000uF	20%	16V	
C145	1-124-903-11	ELECT	1uF	20%	50V	
C146	1-162-282-31	CERAMIC	100PF	10%	50V	
C147	1-162-282-31	CERAMIC	100PF	10%	50V	
C201	1-162-291-31	CERAMIC	560PF	10%	50V	
C202	1-162-291-31	CERAMIC	560PF	10%	50V	
C203	1-162-286-31	CERAMIC	220PF	10%	50V	
C204	1-162-286-31	CERAMIC	220PF	10%	50V	
C205	1-130-486-00	MYLAR	0.018uF	10%	50V	
C206	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C206	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C207	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C208	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C209	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C210	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C210	1-124-477-11	ELECT	47uF	20%	25V	(AUS)

MAIN

Ref. No.	Part No.	Description				Remark
C211	1-124-903-11	ELECT	1uF	20%	50V	
C212	1-124-903-11	ELECT	1uF	20%	50V	
C213	1-124-925-11	ELECT	2.2uF	20%	100V	
C214	1-124-903-11	ELECT	1uF	20%	50V	
C215	1-161-375-00	CERAMIC	0.0022uF	20%	50V	
C216	1-162-286-31	CERAMIC	220PF	10%	50V	
C217	1-162-286-31	CERAMIC	220PF	10%	50V	
C219	1-162-282-31	CERAMIC	100PF	10%	50V	
C221	1-124-927-11	ELECT	4.7uF	20%	100V	
C222	1-124-927-11	ELECT	4.7uF	20%	100V	
C224	1-162-282-31	CERAMIC	100PF	10%	50V	
C225	1-124-902-00	ELECT	0.47uF	20%	50V	
C226	1-161-053-00	CERAMIC	0.015uF	10%	50V	
C227	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C229	1-162-282-31	CERAMIC	100PF	10%	50V	
C231	1-126-233-11	ELECT	22uF	20%	50V	
C232	1-162-282-31	CERAMIC	100PF	10%	50V	
C233	1-161-772-11	CERAMIC	0.1uF	10%	25V	
C234	1-161-377-00	CERAMIC	0.0047uF	30%	16V	
C235	1-124-902-00	ELECT	0.47uF	20%	50V	
C236	1-124-927-11	ELECT	4.7uF	20%	100V	
C237	1-124-927-11	ELECT	4.7uF	20%	100V	
C238	1-124-902-00	ELECT	0.47uF	20%	50V	
C240	1-136-173-00	FILM	0.47uF	5%	50V	
C241	1-162-282-31	CERAMIC	100PF	10%	50V	
C242	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C242	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C243	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C243	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C244	1-124-360-00	ELECT	1000uF	20%	16V	
C245	1-124-903-11	ELECT	1uF	20%	50V	
C246	1-162-282-31	CERAMIC	100PF	10%	50V	
C247	1-162-282-31	CERAMIC	100PF	10%	50V	
C301	1-124-917-11	ELECT	33uF	20%	63V	
C302	1-124-443-00	ELECT	100uF	20%	10V	
C303	1-124-443-00	ELECT	100uF	20%	10V	
C304	1-126-176-11	ELECT	220uF	20%	10V	
C305	1-124-925-11	ELECT	2.2uF	20%	100V	
C306	1-126-233-11	ELECT	22uF	20%	50V	
C307	1-124-443-00	ELECT	100uF	20%	10V	
C309	1-124-907-11	ELECT	10uF	20%	50V	
C311	1-130-481-00	MYLAR	0.0068uF	5%	50V	
C312	1-130-483-00	MYLAR	0.01uF	5%	50V	
C313	1-124-907-11	ELECT	10uF	20%	50V	
C314	1-124-907-11	ELECT	10uF	20%	50V	
C315	1-130-473-00	MYLAR	0.0015uF	5%	50V	
C316	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C317	1-130-476-00	MYLAR	0.0027uF	5%	50V	
C318	1-130-467-00	MYLAR	470PF	5%	50V	

Ref. No.	Part No.	Description				Remark
C319	1-130-472-00	MYLAR	0.0012uF	5%	50V	
C321	1-162-282-31	CERAMIC	100PF	10%	50V	
C322	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C323	1-124-907-11	ELECT	10uF	20%	50V	
C324	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C325	1-124-907-11	ELECT	10uF	20%	50V	
C326	1-162-211-31	CERAMIC	33PF	5%	50V	
C327	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C328	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C328	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C331	1-124-927-11	ELECT	4.7uF	20%	100V	
C332	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C333	1-124-903-11	ELECT	1uF	20%	50V	
C334	1-162-291-31	CERAMIC	560PF	10%	50V	
C335	1-124-927-11	ELECT	4.7uF	20%	100V	
C336	1-124-907-11	ELECT	10uF	20%	50V	
C337	1-162-282-31	CERAMIC	100PF	10%	50V	
C339	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C339	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C340	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C340	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C341	1-124-907-11	ELECT	10uF	20%	50V	
C342	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C342	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C343	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C343	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C344	1-124-907-11	ELECT	10uF	20%	50V	
C345	1-124-907-11	ELECT	10uF	20%	50V	
C346	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C346	1-124-917-11	ELECT	33uF	20%	63V	(AUS)
C347	1-126-176-11	ELECT	220uF	20%	10V	
C348	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C348	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C349	1-124-907-11	ELECT	10uF	20%	50V	
C350	1-126-101-11	ELECT	100uF	20%	16V	
C351	1-124-771-00	ELECT	6800uF	20%	25V	
C352	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C352	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C354	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C355	1-136-173-00	FILM	0.47uF	5%	50V	
C356	1-124-120-11	ELECT	220uF	20%	25V	
C357	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C357	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C358	1-124-910-11	ELECT	47uF	20%	50V	(EXCEPT AUS)
C358	1-124-477-11	ELECT	47uF	20%	25V	(AUS)
C359	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C360	1-124-443-00	ELECT	100uF	20%	10V	
C361	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C363	1-124-907-11	ELECT	10uF	20%	50V	

Ref. No.	Part No.	Description			Remark
C364	1-124-120-11	ELECT	220uF	20% 25V	
C365	1-126-101-11	ELECT	100uF	20% 16V	
C366	1-162-306-11	CERAMIC	0.01uF	20% 16V	
C367	1-162-306-11	CERAMIC	0.01uF	20% 16V	
C368	1-162-306-11	CERAMIC	0.01uF	20% 16V	
C371	1-162-282-31	CERAMIC	100PF	10% 50V	
C372	1-124-907-11	ELECT	10uF	20% 50V	
C373	1-124-907-11	ELECT	10uF	20% 50V	
C374	1-126-176-11	ELECT	220uF	20% 10V	
C375	1-162-286-31	CERAMIC	220PF	10% 50V	
C376	1-162-282-31	CERAMIC	100PF	10% 50V	
C377	1-162-282-31	CERAMIC	100PF	10% 50V	
C378	1-162-282-31	CERAMIC	100PF	10% 50V	
C379	1-162-282-31	CERAMIC	100PF	10% 50V	
		< CONNECTOR >			
* CN301	1-691-610-11	PIN, CONNECTOR (PC BOARD) 20P			
* CN302	1-580-369-11	PIN, CONNECTOR (PC BOARD) 12P			
* CN303	1-695-181-11	PIN, CONNECTOR (PC POARD) 9P			
* CN304	1-695-181-11	PIN, CONNECTOR (PC POARD) 9P			
CN305	1-563-601-11	CONNECTOR, FLEXIBLE 24P			
* CN306	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
* CN307	1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P			
* CN308	1-565-485-11	CONNECTOR, BOARD TO BOARD 9P			
* CN309	1-506-509-11	PIN, CONNECTOR 4P			
* CN311	1-564-599-11	PIN, CONNECTOR 8P			
		< DIODE >			
D101	8-719-911-19	DIODE	1SS119		
D201	8-719-911-19	DIODE	1SS119		
D302	8-719-911-19	DIODE	1SS119		
D303	8-719-911-19	DIODE	1SS119		
D304	8-719-911-19	DIODE	1SS119		
D305	8-719-911-19	DIODE	1SS119		
D306	8-719-110-08	DIODE	RD8.2ES-B2		
D307	8-719-911-19	DIODE	1SS119		
D308	8-719-911-19	DIODE	1SS119		
D309	8-719-110-08	DIODE	RD8.2ES-B2		
D310	8-719-110-08	DIODE	RD8.2ES-B2		
D313	8-719-982-15	DIODE	MTZJ-T-77-27B		
D314	8-719-911-19	DIODE	1SS119		
D315	8-719-911-19	DIODE	1SS119		
D316	8-719-911-19	DIODE	1SS119		
D318	8-719-911-19	DIODE	1SS119		
		< IC >			
IC301	8-759-143-54	IC	uPC1330HA		
IC302	8-759-096-55	IC	KIA6289N		
IC303	8-759-068-07	IC	CD4052BCN		

Ref. No.	Part No.	Description		Remark
IC304	1-807-547-11	IC	MC4558-C	
IC305	8-759-076-14	IC	KIA324P	
IC306	8-759-060-74	IC	TC9213P	
IC307	8-759-501-93	IC	BA5412	
IC308	8-759-060-73	IC	NJU3713D	
IC309	8-759-996-77	IC	BA3924	
IC310	8-759-510-54	IC	PST572D	
IC311	8-759-912-55	IC	S-81250HG	
		< JACK >		
J301	1-563-330-11	JACK		
		< COIL >		
L101	1-410-776-11	INDUCTOR	12mH	
L201	1-410-776-11	INDUCTOR	12mH	
L301	1-410-686-11	INDUCTOR	1mH	
L302	1-410-509-11	INDUCTOR	10uH	
L303	1-410-521-11	INDUCTOR	100uH	
L305	1-410-509-11	INDUCTOR	10uH	
L306	1-410-509-11	INDUCTOR	10uH	
L307	1-410-521-11	INDUCTOR	100uH	
L308	1-410-521-11	INDUCTOR	100uH	
L309	1-410-521-11	INDUCTOR	100uH	
L310	1-410-521-11	INDUCTOR	100uH	
L311	1-410-521-11	INDUCTOR	100uH	
L312	1-410-521-11	INDUCTOR	100uH	
L313	1-410-521-11	INDUCTOR	100uH	
L315	1-410-521-11	INDUCTOR	100uH	
L316	1-410-678-31	INDUCTOR	220uH	
L317	1-410-521-11	INDUCTOR	100uH	
L318	1-410-521-11	INDUCTOR	100uH	
L320	1-410-521-11	INDUCTOR	100uH	
		< TRANSISTOR >		
Q101	8-729-806-30	TRANSISTOR	2SC4048	
Q103	8-729-806-30	TRANSISTOR	2SC4048	
Q104	8-729-806-30	TRANSISTOR	2SC4048	
Q105	8-729-806-30	TRANSISTOR	2SC4048	
Q106	8-729-806-30	TRANSISTOR	2SC4048	
Q107	8-729-806-30	TRANSISTOR	2SC4048	
Q108	8-729-806-30	TRANSISTOR	2SC4048	
Q109	8-729-016-42	TRANSISTOR	KTC3199GR-TP	
Q110	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q201	8-729-806-30	TRANSISTOR	2SC4048	
Q203	8-729-806-30	TRANSISTOR	2SC4048	
Q204	8-729-806-30	TRANSISTOR	2SC4048	
Q205	8-729-806-30	TRANSISTOR	2SC4048	
Q206	8-729-806-30	TRANSISTOR	2SC4048	

MAIN

Ref. No.	Part No.	Description		Remark
Q207	8-729-806-30	TRANSISTOR	2SC4048	
Q208	8-729-806-30	TRANSISTOR	2SC4048	
Q209	8-729-016-42	TRANSISTOR	KTC3199GR-TP	
Q210	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q301	1-807-545-11	TRANSISTOR	KSC1008-Y	
Q302	8-729-806-30	TRANSISTOR	2SC4048	
Q303	8-729-806-30	TRANSISTOR	2SC4048	
Q304	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q305	8-729-119-78	TRANSISTOR	2SC2785-HFE	
Q306	8-729-806-30	TRANSISTOR	2SC4048	
Q307	8-729-924-90	TRANSISTOR	2SB1370-EF	
Q308	8-729-902-80	TRANSISTOR	DTA114YS	
Q309	8-729-806-30	TRANSISTOR	2SC4048	
Q310	8-729-902-80	TRANSISTOR	DTA114YS	
Q311	8-729-902-80	TRANSISTOR	DTA114YS	
Q312	8-729-806-30	TRANSISTOR	2SC4048	
Q313	8-729-209-15	TRANSISTOR	2SD2012	
Q314	8-729-902-80	TRANSISTOR	DTA114YS	
Q315	8-729-806-30	TRANSISTOR	2SC4048	
Q316	8-729-806-30	TRANSISTOR	2SC4048	
Q317	8-729-806-30	TRANSISTOR	2SC4048	
Q318	8-729-801-84	TRANSISTOR	2SB1013-4	
Q319	8-729-806-30	TRANSISTOR	2SC4048	
Q320	8-729-119-78	TRANSISTOR	2SC2785-HFE	
		< RESISTOR >		
R101	1-249-417-11	CARBON	1K 5% 1/4W	
R102	1-249-417-11	CARBON	1K 5% 1/4W	
R103	1-249-405-11	CARBON	100 5% 1/4W	
R104	1-247-885-00	CARBON	180K 5% 1/4W	
R105	1-249-427-11	CARBON	6.8K 5% 1/4W	
R106	1-249-427-11	CARBON	6.8K 5% 1/4W	
R107	1-247-885-00	CARBON	180K 5% 1/4W	
R108	1-247-890-11	CARBON	300K 5% 1/4W	
R109	1-249-407-11	CARBON	150 5% 1/4W	
R110	1-249-429-11	CARBON	10K 5% 1/4W	
R111	1-249-419-11	CARBON	1.5K 5% 1/4W	
R112	1-249-405-11	CARBON	100 5% 1/4W	
R113	1-247-846-11	CARBON	4.3K 5% 1/4W	
R114	1-249-423-11	CARBON	3.3K 5% 1/4W	
R115	1-249-421-11	CARBON	2.2K 5% 1/4W	
R116	1-249-419-11	CARBON	1.5K 5% 1/4W	
R117	1-249-437-11	CARBON	47K 5% 1/4W	
R118	1-249-431-11	CARBON	15K 5% 1/4W	(EXCEPT AUS)
R118	1-249-430-11	CARBON	12K 5% 1/4W	(AUS)
R119	1-249-423-11	CARBON	3.3K 5% 1/4W	
R121	1-249-437-11	CARBON	47K 5% 1/4W	
R122	1-249-421-11	CARBON	2.2K 5% 1/4W	

Ref. No.	Part No.	Description		Remark
R123	1-247-849-91	CARBON	5.6K 5% 1/4W	
R124	1-249-421-11	CARBON	2.2K 5% 1/4W	
R125	1-249-431-11	CARBON	15K 5% 1/4W	
R126	1-247-881-00	CARBON	120K 5% 1/4W	
R127	1-249-429-11	CARBON	10K 5% 1/4W	
R128	1-249-426-11	CARBON	5.6K 5% 1/4W	
R129	1-249-429-11	CARBON	10K 5% 1/4W	
R130	1-249-441-11	CARBON	100K 5% 1/4W	
R131	1-249-433-11	CARBON	22K 5% 1/4W	
R132	1-249-431-11	CARBON	15K 5% 1/4W	
R133	1-247-895-00	CARBON	470K 5% 1/4W	
R134	1-247-895-00	CARBON	470K 5% 1/4W	
R135	1-247-895-00	CARBON	470K 5% 1/4W	
R136	1-249-433-11	CARBON	22K 5% 1/4W	
R137	1-249-430-11	CARBON	12K 5% 1/4W	
R138	1-249-429-11	CARBON	10K 5% 1/4W	
R139	1-249-429-11	CARBON	10K 5% 1/4W	
R141	1-247-903-00	CARBON	1M 5% 1/4W	
R142	1-247-903-00	CARBON	1M 5% 1/4W	
R143	1-247-887-00	CARBON	220K 5% 1/4W	
R144	1-249-417-11	CARBON	1K 5% 1/4W	
R145	1-249-417-11	CARBON	1K 5% 1/4W	
R146	1-249-410-11	CARBON	270 5% 1/4W	
R147	1-249-429-11	CARBON	10K 5% 1/4W	
R148	1-249-417-11	CARBON	1K 5% 1/4W	
R151	1-249-429-11	CARBON	10K 5% 1/4W	
R201	1-249-417-11	CARBON	1K 5% 1/4W	
R202	1-249-417-11	CARBON	1K 5% 1/4W	
R203	1-249-405-11	CARBON	100 5% 1/4W	
R204	1-247-885-00	CARBON	180K 5% 1/4W	
R205	1-249-427-11	CARBON	6.8K 5% 1/4W	
R206	1-249-427-11	CARBON	6.8K 5% 1/4W	
R207	1-247-885-00	CARBON	180K 5% 1/4W	
R208	1-247-890-11	CARBON	300K 5% 1/4W	
R209	1-249-407-11	CARBON	150 5% 1/4W	
R210	1-249-429-11	CARBON	10K 5% 1/4W	
R211	1-249-419-11	CARBON	1.5K 5% 1/4W	
R212	1-249-405-11	CARBON	100 5% 1/4W	
R213	1-247-846-11	CARBON	4.3K 5% 1/4W	
R214	1-249-423-11	CARBON	3.3K 5% 1/4W	
R215	1-249-421-11	CARBON	2.2K 5% 1/4W	
R216	1-249-419-11	CARBON	1.5K 5% 1/4W	
R217	1-249-437-11	CARBON	47K 5% 1/4W	
R218	1-249-431-11	CARBON	15K 5% 1/4W	(EXCEPT AUS)
R218	1-249-430-11	CARBON	12K 5% 1/4W	(AUS)
R219	1-249-423-11	CARBON	3.3K 5% 1/4W	
R221	1-249-437-11	CARBON	47K 5% 1/4W	
R222	1-249-421-11	CARBON	2.2K 5% 1/4W	

Ref. No.	Part No.	Description				Remark
R223	1-247-849-11	CARBON	5.6K	5%	1/4W	
R224	1-249-421-11	CARBON	2.2K	5%	1/4W	
R225	1-249-431-11	CARBON	15K	5%	1/4W	
R226	1-247-881-00	CARBON	120K	5%	1/4W	
R227	1-249-429-11	CARBON	10K	5%	1/4W	
R228	1-249-426-11	CARBON	5.6K	5%	1/4W	
R229	1-249-429-11	CARBON	10K	5%	1/4W	
R230	1-249-441-11	CARBON	100K	5%	1/4W	
R231	1-249-433-11	CARBON	22K	5%	1/4W	
R232	1-249-431-11	CARBON	15K	5%	1/4W	
R233	1-247-895-00	CARBON	470K	5%	1/4W	
R234	1-247-895-00	CARBON	470K	5%	1/4W	
R235	1-247-895-00	CARBON	470K	5%	1/4W	
R236	1-249-433-11	CARBON	22K	5%	1/4W	
R237	1-249-430-11	CARBON	12K	5%	1/4W	
R238	1-249-429-11	CARBON	10K	5%	1/4W	
R239	1-249-429-11	CARBON	10K	5%	1/4W	
R241	1-247-903-00	CARBON	1M	5%	1/4W	
R242	1-247-903-00	CARBON	1M	5%	1/4W	
R243	1-247-887-00	CARBON	220K	5%	1/4W	
R244	1-249-417-11	CARBON	1K	5%	1/4W	
R245	1-249-417-11	CARBON	1K	5%	1/4W	
R246	1-249-410-11	CARBON	270	5%	1/4W	
R247	1-249-429-11	CARBON	10K	5%	1/4W	
R248	1-249-417-11	CARBON	1K	5%	1/4W	
R251	1-249-429-11	CARBON	10K	5%	1/4W	
R300	1-249-423-11	CARBON	3.3K	5%	1/4W	
R301	1-249-429-11	CARBON	10K	5%	1/4W	
R302	1-249-405-11	CARBON	100	5%	1/4W	
R303	1-249-429-11	CARBON	10K	5%	1/4W	
R304	1-249-423-11	CARBON	3.3K	5%	1/4W	
R305	1-249-433-11	CARBON	22K	5%	1/4W	
R306	1-249-433-11	CARBON	22K	5%	1/4W	
R307	1-249-405-11	CARBON	100	5%	1/4W	
R308	1-247-903-00	CARBON	1M	5%	1/4W	
R309	1-249-417-11	CARBON	1K	5%	1/4W	
R310	1-249-425-11	CARBON	4.7K	5%	1/4W	
R312	1-249-425-11	CARBON	4.7K	5%	1/4W	
R313	1-249-402-11	CARBON	56	5%	1/4W	
R314	1-249-401-11	CARBON	47	5%	1/4W	
R315	1-249-429-11	CARBON	10K	5%	1/4W	
R316	1-249-393-11	CARBON	10	5%	1/4W	
R317	1-249-423-11	CARBON	3.3K	5%	1/4W	
R318	1-249-440-11	CARBON	82K	5%	1/4W	
R319	1-249-437-11	CARBON	47K	5%	1/4W	
R320	1-249-437-11	CARBON	47K	5%	1/4W	
R321	1-249-405-11	CARBON	100	5%	1/4W	
R322	1-247-895-00	CARBON	470K	5%	1/4W	
R324	1-249-405-11	CARBON	100	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R325	1-249-405-11	CARBON	100	5%	1/4W	
R326	1-249-417-11	CARBON	1K	5%	1/4W	
R327	1-249-437-11	CARBON	47K	5%	1/4W	
R328	1-249-441-11	CARBON	100K	5%	1/4W	
R329	1-249-441-11	CARBON	100K	5%	1/4W	
R330	1-247-881-00	CARBON	120K	5%	1/4W	
R331	1-249-429-11	CARBON	10K	5%	1/4W	
R332	1-249-429-11	CARBON	10K	5%	1/4W	
R333	1-249-405-11	CARBON	100	5%	1/4W	
R334	1-249-437-11	CARBON	47K	5%	1/4W	
R335	1-249-405-11	CARBON	100	5%	1/4W	
R336	1-249-425-11	CARBON	4.7K	5%	1/4W	
R337	1-249-425-11	CARBON	4.7K	5%	1/4W	
R338	1-249-429-11	CARBON	10K	5%	1/4W	
R339	1-249-429-11	CARBON	10K	5%	1/4W	
R340	1-249-429-11	CARBON	10K	5%	1/4W	
R341	1-249-429-11	CARBON	10K	5%	1/4W	
R342	1-249-429-11	CARBON	10K	5%	1/4W	(EXCEPT AUS)
R342	1-249-425-11	CARBON	4.7K	5%	1/4W	(AUS)
R343	1-249-437-11	CARBON	47K	5%	1/4W	(EXCEPT AUS)
R343	1-249-429-11	CARBON	10K	5%	1/4W	(AUS)
R344	1-249-405-11	CARBON	100	5%	1/4W	
R345	1-249-415-11	CARBON	680	5%	1/4W	
R346	1-249-415-11	CARBON	680	5%	1/4W	
R347	1-249-405-11	CARBON	100	5%	1/4W	
R348	1-249-419-11	CARBON	1.5K	5%	1/4W	
R349	1-249-429-11	CARBON	10K	5%	1/4W	
R350	1-249-418-11	CARBON	1.2K	5%	1/4W	
R351	1-247-883-00	CARBON	150K	5%	1/4W	
R352	1-249-437-11	CARBON	47K	5%	1/4W	
R353	1-249-425-11	CARBON	4.7K	5%	1/4W	
R354	1-249-414-11	CARBON	560	5%	1/4W	
⚠R355	1-219-149-11	FUSIBLE	1	5%	1/4W	F
R356	1-249-413-11	CARBON	470	5%	1/4W	
R357	1-249-419-11	CARBON	1.5K	5%	1/4W	
R363	1-249-429-11	CARBON	10K	5%	1/4W	
R370	1-249-405-11	CARBON	100	5%	1/4W	
R371	1-249-429-11	CARBON	10K	5%	1/4W	
R375	1-249-417-11	CARBON	1K	5%	1/4W	
R381	1-249-421-11	CARBON	2.2K	5%	1/4W	
R382	1-249-437-11	CARBON	47K	5%	1/4W	
R383	1-249-417-11	CARBON	1K	5%	1/4W	
R385	1-249-417-11	CARBON	1K	5%	1/4W	

< SWITCH >

S301	1-571-307-11	SWITCH, SLIDE	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN | POWER | RELAY (M-H/P) | RELAY (M-PO) | RELAY (M-TC) | RELAY (M-TU) | RELAY (PO-BA)

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
T301	1-433-372-11	TRANSFORMER, BIAS OSCILLATION	
T302	1-450-126-11	TRANSFORMER, DC-DC CONVERTER	
**********			
*	1-644-438-11	POWER BOARD	
		**********	
	1-533-233-11	HOLDER, FUSE	
		< CAPACITOR >	
C901	1-101-005-00	CERAMIC 22000PF	50V
C902	1-101-005-00	CERAMIC 22000PF	50V
C903	1-101-005-00	CERAMIC 22000PF	50V
C904	1-101-005-00	CERAMIC 22000PF	50V
		< CONNECTOR >	
CN901	1-573-457-11	PLUG, CONNECTOR (2.5MM) 6P	
* CN902	1-506-680-11	PLUG, CONNECTOR (2.5MM) 3P	
		< DIODE >	
D901	8-719-312-09	DIODE RBA-402	
		< JACK >	
⚠J901	1-540-009-11	INLET, AC	(EXCEPT AUS)
⚠J901	1-526-838-11	INLET, AC	(AUS)
		< LINE FILTER >	
⚠LF901	1-424-150-11	TRANSFORMER, LINE FILTER	
**********			
*	1-644-435-11	RELAY (M-H/P) BOARD	
		**********	
		< CONNECTOR >	
* CN314	1-560-531-00	PIN, CONNECTOR 5P	
		< CONNECTOR >	
CNP310	1-506-906-11	PIN, CONNECTOR 5P	
**********			
*	1-644-432-11	RELAY (M-PO) BOARD	
		**********	
		< CONNECTOR >	
CN315	1-566-690-11	PLUG, CONNECTOR (2.5MM) 2P	
CN316	1-573-457-11	PLUG, CONNECTOR (2.5MM) 6P	

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CNP311	1-565-484-11	CONNECTOR, BOARD TO BOARD 8P	
**********			
*	1-644-446-11	RELAY (M-TC) BOARD	
		**********	
		< CONNECTOR >	
CNP308	1-573-379-11	PIN, CONNECTOR 9P	
CNP601	1-573-379-11	PIN, CONNECTOR 9P	
**********			
*	1-644-433-11	RELAY (M-TU) BOARD	
		**********	
		< CONNECTOR >	
CN313	1-566-690-11	PLUG, CONNECTOR (2.5MM) 2P	
* CN317	1-563-594-11	CONNECTOR, FLEXIBLE 17P	
* CN318	1-506-987-11	PIN, CONNECTOR (PC BOARD) 5P	
		< CONNECTOR >	
* CNP303	1-695-156-11	PIN, CONNECTOR (PC BOARD) 9P	
* CNP304	1-695-156-11	PIN, CONNECTOR (PC BOARD) 9P	
* CNP309	1-565-480-11	CONNECTOR, BOARD TO BOARD 4P	
		< DIODE >	
D301	8-719-911-19	DIODE 1SS119	
**********			
*	1-644-445-11	RELAY (PO-BA) BOARD	
		**********	
		< CONNECTOR >	
* CN904	1-506-680-11	PLUG, CONNECTOR (2.5MM) 3P	
* CN905	1-506-680-11	PLUG, CONNECTOR (2.5MM) 3P	
		< DIODE >	
D902	8-719-911-19	DIODE 1SS119	
D903	8-719-911-19	DIODE 1SS119	
		< IC >	
IC312	8-759-912-55	IC S-81250HG	
		< RESISTOR >	
R360	1-247-895-00	CARBON 470K 5%	1/4W
R361	1-247-887-00	CARBON 220K 5%	1/4W

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description				Remark
*	1-644-442-11	RELAY (TC-45) BOARD				(CFD-250)
		**********				
		< CONNECTOR >				
* CNP604	1-506-509-11	PIN, CONNECTOR 4P				
* CNP607	1-506-509-11	PIN, CONNECTOR 4P				
**********						
*	1-644-443-11	RELAY (TC-70) BOARD				(CFD-260)
		**********				
		< CONNECTOR >				
* CNP603	1-560-532-00	PIN, CONNECTOR 7P				
* CNP606	1-560-532-00	PIN, CONNECTOR 7P				
**********						
*	1-644-520-11	SWITCH BOARD				
		**********				
CNP805	1-562-087-00	SOCKET, CONNECTOR 4P				
		< SWITCH >				
S815	1-572-199-11	SWITCH, KEY BOARD				
**********						
*	A-3262-561-A	TC BOARD, COMPLETE				(CFD-250)
*	A-3262-580-A	TC BOARD, COMPLETE				(CFD-260)
		**********				
	1-571-890-11	SWITCH, LEAF				
		< CAPACITOR >				
C601	1-126-103-11	ELECT	470uF	20%	16V	(CFD-260)
C602	1-126-233-11	ELECT	22uF	20%	50V	
C603	1-124-907-11	ELECT	10uF	20%	50V	
C604	1-126-233-11	ELECT	22uF	20%	50V	(CFD-260)
C605	1-124-927-11	ELECT	4.7uF	20%	100V	(CFD-250)
C606	1-162-294-31	CERAMIC	0.001F	20%	50V	(CFD-260)
		< CONNECTOR >				
* CN601	1-565-485-11	CONNECTOR, BOARD TO BOARD 9P				
* CN602	1-566-779-11	PIN, CONNECTOR (PC BOARD) 4P				
* CN603	1-561-651-00	SOCKET, CONNECTOR 7P				(CFD-260)
CN604	1-562-087-00	SOCKET, CONNECTOR 4P				(CFD-250)
* CN605	1-566-779-11	PIN, CONNECTOR (PC BOARD) 4P				
		< CONNECTOR >				
* CNP610	1-560-456-00	PIN, CONNECTOR 2P				

Ref. No.	Part No.	Description				Remark
		< DIODE >				
D601	8-719-911-19	DIODE	1SS119			
D602	8-719-911-19	DIODE	1SS119			
D603	8-719-911-19	DIODE	1SS119			
D604	8-719-911-19	DIODE	1SS119			
D605	8-719-911-19	DIODE	1SS119			(CFD-260)
D606	8-719-911-19	DIODE	1SS119			(CFD-260)
D607	8-719-911-19	DIODE	1SS119			(CFD-260)
D608	8-719-911-19	DIODE	1SS119			(CFD-260)
D609	8-719-911-19	DIODE	1SS119			
D611	8-719-109-89	DIODE	RD5.6ES-B2			(CFD-260)
		< TRANSISTOR >				
Q601	8-729-801-84	TRANSISTOR	2SB1013-4			
Q602	8-729-806-30	TRANSISTOR	2SC4048			
Q603	8-729-902-80	TRANSISTOR	DTA114YS			
Q604	8-729-806-30	TRANSISTOR	2SC4048			
Q605	8-729-806-30	TRANSISTOR	2SC4048			
Q606	8-729-806-30	TRANSISTOR	2SC4048			
Q607	8-729-119-78	TRANSISTOR	2SC2785-HFE			(CFD-250)
Q607	8-729-806-30	TRANSISTOR	2SC4048			(CFD-260)
Q608	8-729-115-30	TRANSISTOR	2SK104H			
Q609	8-729-806-30	TRANSISTOR	2SC4048			
Q612	8-729-806-30	TRANSISTOR	2SC4048			
		< RESISTOR >				
R304	1-249-425-11	CARBON	4.7K	5%	1/4W	(CFD-250)
R601	1-249-441-11	CARBON	100K	5%	1/4W	
R602	1-249-419-11	CARBON	1.5K	5%	1/4W	
R603	1-249-425-11	CARBON	4.7K	5%	1/4W	
R604	1-249-425-11	CARBON	4.7K	5%	1/4W	(CFD-260)
R605	1-249-425-11	CARBON	4.7K	5%	1/4W	
R606	1-249-271-11	CARBON	6.8K	5%	1/4W	(CFD-250)
R606	1-249-441-11	CARBON	100K	5%	1/4W	(CFD-260)
R607	1-249-423-11	CARBON	3.3K	5%	1/4W	(CFD-250)
R607	1-249-426-11	CARBON	5.6K	5%	1/4W	(CFD-260)
R608	1-249-441-11	CARBON	100K	5%	1/4W	(CFD-260)
R609	1-249-426-11	CARBON	5.6K	5%	1/4W	(CFD-260)
R610	1-249-425-11	CARBON	4.7K	5%	1/4W	(CFD-250)
R610	1-249-425-11	CARBON	4.7K	5%	1/4W	(CFD-260)
R612	1-249-425-11	CARBON	4.7K	5%	1/4W	
⚠R651	1-219-149-11	FUSEBLE	1	5%	1/4W F	
		< VARIABLE RESISTOR >				
RV601	1-230-495-11	RES, ADJ, CARBON	2.2K			
RV602	1-230-495-11	RES, ADJ, CARBON	2.2K			
RV603	1-230-495-11	RES, ADJ, CARBON	2.2K			(CFD-260)
RV604	1-230-495-11	RES, ADJ, CARBON	2.2K			(CFD-260)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

TC TU

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
S601	1-571-890-11	SWITCH, LEAF			(CFD-260)
S602	1-571-890-11	SWITCH, LEAF			(CFD-260)
S603	1-571-890-11	SWITCH, LEAF			(CFD-260)
**********					
*	A-3275-480-A	TU BOARD, COMPLETE			(EXCEPT AUS)
*	A-3275-713-A	TU BOARD, COMPLETE			(AUS)
		**********			
		< CAPACITOR >			
C1	1-102-945-00	CERAMIC	8.0PF	+-0.5PF	50V
C2	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C3	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C4	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C5	1-163-088-00	CERAMIC CHIP	5PF		50V
C6	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C8	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C9	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C10	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C11	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C12	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C13	1-124-126-00	ELECT	47uF	20%	10V
C14	1-164-345-11	CERAMIC CHIP	0.082uF	10%	25V
C15	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C16	1-124-903-11	ELECT	1uF	20%	50V
C17	1-164-345-11	CERAMIC CHIP	0.082uF	10%	25V
C18	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C19	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C20	1-124-903-11	ELECT	1uF	20%	50V
C21	1-124-907-11	ELECT	10uF	20%	50V
C22	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C23	1-124-443-00	ELECT	100uF	20%	10V
C24	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C25	1-102-824-00	CERAMIC	470PF	5%	50V
C26	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C27	1-162-847-11	CERAMIC	0.047uF	10%	16V
C28	1-162-839-11	CERAMIC	0.01uF	10%	16V
C29	1-162-827-11	CERAMIC	0.001uF	10%	16V
C30	1-102-951-00	CERAMIC	15PF	5%	50V
C31	1-162-827-11	CERAMIC	0.001uF	10%	16V
C32	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C33	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C34	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C35	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C36	1-124-907-11	ELECT	10uF	20%	50V
C37	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C38	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C39	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C40	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C41	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C42	1-136-177-00	FILM	1uF	5%	50V
C43	1-130-483-00	MYLAR	0.01uF	5%	50V
C44	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C45	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C48	1-162-839-11	CERAMIC	0.01uF	10%	16V
C49	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C50	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C51	1-124-902-00	ELECT	0.47uF	20%	50V
C52	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V
C53	1-124-902-00	ELECT	0.47uF	20%	50V
C54	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C55	1-124-907-11	ELECT	10uF	20%	50V
C68	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C69	1-124-927-11	ELECT	4.7uF	20%	100V
C70	1-124-903-11	ELECT	1uF	20%	50V
C71	1-124-443-00	ELECT	100uF	20%	10V
C72	1-124-907-11	ELECT	10uF	20%	50V
C73	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C74	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C77	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C78	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C79	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C81	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C82	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C83	1-163-059-00	CERAMIC CHIP	0.01uF	10%	50V
C84	1-164-232-11	CERAMIC CHIP	0.01uF		50V
		< FILTER >			
CF1	1-578-781-11	FILTER, CERAMIC			
CF2	1-578-781-11	FILTER, CERAMIC			
CF3	1-578-781-11	FILTER, CERAMIC			
CF4	1-578-779-21	VIBLATOR, CERAMIC			
CF11	1-239-173-11	ENCAPSULATED COMPONENT			
		< CONNECTOR >			
CN1	1-563-620-11	CONNECTOR, FLEXIBLE 17P			
* CN2	1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P			
		< TRIMMER >			
CT1	1-141-411-11	CAP, ADJ 20PF			
CT2	1-141-411-11	CAP, ADJ 20PF			
		< DIODE >			
D1	8-719-800-76	DIODE	1SS226		
D2	8-719-026-23	DIODE	MA786		
D5	8-719-980-71	DIODE	SVC342L-V		

Ref. No.	Part No.	Description			Remark
D7	8-713-300-57	DIODE 1T33			
D8	8-713-300-57	DIODE 1T33			
		< FILTER >			
FL1	1-236-022-11	FILTER, BAND PASS			
		< IC >			
IC1	8-759-242-89	IC TA2012N			
IC2	8-759-823-81	IC LC7216M			
IC3	8-759-039-95	IC TA8176SN			
		< COIL >			
L1	1-406-483-11	COIL (OSC)			
L2	1-402-581-11	ANTENNA, FERRITE-ROD (MW)			
L3	1-426-593-11	COIL (RF)			
L6	1-406-484-21	COIL, FM OSC			
L11	1-410-977-11	INDUCTOR 100uH			
L13	1-410-971-11	INDUCTOR 10uH			
L14	1-410-971-11	INDUCTOR 10uH			
L21	1-410-204-31	INDUCTOR CHIP 10uH			
		< TRANSISTOR >			
Q1	8-729-920-38	TRANSISTOR 2SC2059K-N			
Q4	8-729-424-38	TRANSISTOR UN2110			
Q5	8-729-805-66	TRANSISTOR 2SA1496-TB			
Q6	8-729-424-38	TRANSISTOR UN2110			
Q7	8-729-920-31	TRANSISTOR DTC343TK			
Q8	8-729-012-83	TRANSISTOR 2SK679A			
Q11	8-729-805-94	TRANSISTOR 2SC4047			
Q13	8-729-805-78	TRANSISTOR 2SA1502-TB			
Q14	8-729-805-94	TRANSISTOR 2SC4047			
Q15	8-729-923-65	TRANSISTOR DTA143ZK			
Q16	8-729-805-94	TRANSISTOR 2SC4047			
Q17	8-729-805-78	TRANSISTOR 2SA1502-TB			
Q18	8-729-805-45	TRANSISTOR 2SC3395			
Q19	8-729-805-78	TRANSISTOR 2SA1502-TB			
Q21	8-729-920-31	TRANSISTOR DTC343TK			
Q22	8-729-920-31	TRANSISTOR DTC343TK			
		< RESISTOR >			
R1	1-216-049-00	METAL CHIP	1K	5%	1/10W
R2	1-216-021-00	METAL CHIP	68	5%	1/10W
R3	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R4	1-216-089-00	METAL CHIP	47K	5%	1/10W
R5	1-216-077-00	METAL CHIP	15K	5%	1/10W
R6	1-216-013-00	METAL CHIP	33	5%	1/10W
R7	1-216-077-00	METAL CHIP	15K	5%	1/10W
R8	1-216-081-00	METAL CHIP	22K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R9	1-216-035-00	METAL CHIP	270	5%	1/10W
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W
R11	1-216-073-00	METAL CHIP	10K	5%	1/10W
R12	1-216-089-00	METAL CHIP	47K	5%	1/10W
R14	1-216-073-00	METAL CHIP	10K	5%	1/10W
R15	1-216-033-00	METAL CHIP	220	5%	1/10W
R17	1-216-089-00	METAL CHIP	47K	5%	1/10W
R18	1-216-027-00	METAL CHIP	120	5%	1/10W
R19	1-216-037-00	METAL CHIP	330	5%	1/10W
R20	1-216-089-00	METAL CHIP	47K	5%	1/10W
R21	1-216-021-00	METAL CHIP	68	5%	1/10W
R22	1-216-075-00	METAL CHIP	12K	5%	1/10W
R23	1-216-083-00	METAL CHIP	27K	5%	1/10W
R24	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R25	1-216-049-00	METAL CHIP	1K	5%	1/10W
R26	1-216-049-00	METAL CHIP	1K	5%	1/10W
R27	1-216-049-00	METAL CHIP	1K	5%	1/10W
R28	1-216-295-00	METAL CHIP	0	5%	1/10W
R29	1-216-049-00	METAL CHIP	1K	5%	1/10W
R30	1-216-049-00	METAL CHIP	1K	5%	1/10W
R31	1-216-049-00	METAL CHIP	1K	5%	1/10W
R32	1-216-077-00	METAL CHIP	15K	5%	1/10W
R33	1-216-073-00	METAL CHIP	10K	5%	1/10W
R34	1-216-073-00	METAL CHIP	10K	5%	1/10W
R37	1-216-025-00	METAL CHIP	100	5%	1/10W
R41	1-216-073-00	METAL CHIP	10K	5%	1/10W
R42	1-216-089-00	METAL CHIP	47K	5%	1/10W
R43	1-216-049-00	METAL CHIP	1K	5%	1/10W
R45	1-216-089-00	METAL CHIP	47K	5%	1/10W
R46	1-216-689-11	METAL CHIP	39K	0.5%	1/10W
R47	1-216-025-00	METAL CHIP	100	5%	1/10W
R48	1-216-017-00	METAL CHIP	47	5%	1/10W
R51	1-216-025-00	METAL CHIP	100	5%	1/10W
R52	1-216-295-00	METAL CHIP	0	5%	1/10W
		< TRANSFORMER >			
T1	1-416-015-21	TRANSFORMER, IF			
		< VIBRATOR >			
X1	1-579-574-21	VIBRATOR, CRYSTAL 7.2MHZ			

****

MISCELLANEOUS

****

59	1-696-060-11	WIRE, PARALLEL (FFC) (17 CORE)
63	1-696-061-11	WIRE, PARALLEL (FFC) (24 CORE)
606	1-949-833-11	HARNESS (SW (K))
615	1-949-834-21	HARNESS (D)

Ref. No.	Part No.	Description	Remark
616	1-949-834-11	HARNESS (D)	
⚠660	8-848-246-01	PICKUP, OPTICAL KSS-360A	
ANT1	1-501-480-11	ANTENNA, TELESCOPIC	
⚠F901	1-532-299-00	FUSE, TIME-LAG (5A/250V)	(AUS)
⚠F901	1-576-030-11	FUSE, GLASS TUBE (5A/125V)	(EXCEPT AUS)
HE101	1-543-525-11	HEAD, MAGNETIC (ERASE)	(CFD-250)
HE101	1-543-719-11	HEAD, MAGNETIC (ERASE)	(CFD-260)
HP101	1-543-628-11	HEAD, MAGNETIC (PB)	(CFD-250)
HP101	1-543-714-11	HEAD, MAGNETIC (PB)	(CFD-260)
HRP101	1-500-012-11	HEAD MAGNETIC (REC/PB) (WITH FLEXBLE BOARD)	(CFD-260:NEW TYPE)
HRP101	1-543-628-11	HEAD, MAGNETIC (REC/PB)	(CFD-250)
HRP101	1-543-872-11	HEAD, MAGNETIC (REC/PB)	(CFD-260:FORMER TYPE)
L701	1-410-678-31	MICRO INDUCTOR (220uH)	
L702	1-410-678-31	MICRO INDUCTOR (220uH)	
M601	X-3366-404-1	MOTOR ASSY (REEL/CAPSTAN)	(CFD-260)
M601	X-4920-924-1	MOTOR ASSY (REEL/CAPSTAN)	(CFD-250)
M602	A-3253-408-A	MOTOR ASSY (9F) (REEL/CAPSTAN)	(CFD-260)
M701	X-2625-352-1	MOTOR ASSY, SLED	
M702	X-2625-354-1	MOTOR ASSY, SPINDLE	
M703	X-2625-350-1	MOTOR ASSY, LOADING	
S608	1-570-559-21	LEAF SWITCH (DIR)	(CFD-260)
S609	1-571-348-11	LEAF SWITCH (F/R)	(CFD-260)
S701	1-570-771-21	SWITCH (LIMIT)	
S702	1-692-053-11	SWITCH, LEAF (LOAD IN/OUT)	
SP901	1-544-700-11	SPEAKER	(CFD-260)
SP901	1-544-700-21	SPEAKER	(CFD-250)
SP902	1-544-700-11	SPEAKER	(CFD-260)
SP902	1-544-700-21	SPEAKER	(CFD-250)
⚠T901	1-423-303-11	TRANSFORMER, POWER	(AUS)
⚠T901	1-450-967-11	TRANSFORMER, POWER	(EXCEPT AUS)

****

ACCESSORIES & PACKING MATERIALS

****

	1-693-146-11	REMOTE COMMANDER (RMT-C767)	
⚠	1-557-287-11	CORD, POWER	(E)
⚠	1-696-064-21	CORD, POWER (POLARIZED)	(US)
⚠	1-696-442-21	CORD, POWER (POLARIZED)	(CND)
⚠	1-696-819-01	CORD, POWER	(AUS)
	2-181-754-01	COVER, BATTERY CASE (FOR REMORT COMMANDER)	
*	3-380-823-01	CUSHION (L)	
*	3-380-834-01	CUSHION (R)	
*	3-380-824-01	INDIVIDUAL CARTON	(CFD-250)
*	3-380-828-01	INDIVIDUAL CARTON	(CFD-260)
	3-755-228-21	MANUAL, INSTRUCTION (ENGLISH)	
	3-755-228-31	MANUAL, INSTRUCTION (FRENCH)	(CND)
	3-755-228-51	MANUAL, INSTRUCTION (CHINESE)	(E)

****

****

HARDWARE LIST

****

#1	7-685-648-79	SCREW, TAPPING +BV 3X12	
#2	7-682-549-04	SCREW +B 3X10	
#3	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S	
#4	7-682-548-04	SCREW +BVTT 3X8 (S)	(CFD-250)
#5	7-685-646-79	SCREW, TAPPING +BV 3X8	(CFD-260)
#6	7-685-152-19	SCREW +BTP 3X25 TYPE2 N-S	(CFD-260)
#7	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT	
#8	7-685-144-19	SCREW +P 3X5 TYPE2 NON-SLIT	(CFD-250)
#9	7-621-775-20	SCREW +B 2.6X5	(CFD-260)
#10	7-685-133-19	SCREW +P 2.6X6 TYPE2	
#11	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
#12	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT	
#13	7-627-554-07	PRECISION SCREW +P 2X2.2 TYPE3	
#14	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	
#15	7-627-850-18	SCREW, PRECISION +P 1.4X2.5	
#16	7-627-852-17	+P 1.7X4	
#17	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
#18	7-621-255-65	SCREW +P 2X10	(CFD-260:NEW TYPE)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

English
93A1834-1
Printed in Japan
©1993.1
Published by Audio Corporate Planning Group

9-957-631-11
(Including 9-957-631-91)

Sony Corporation
General Audio Group

CFD-250/260

SONY®
SERVICE MANUAL

US Model
Canadian Model
CFD-250/260
Australian Model
CFD-250
E Model
CFD-260

SUPPLEMENT-1

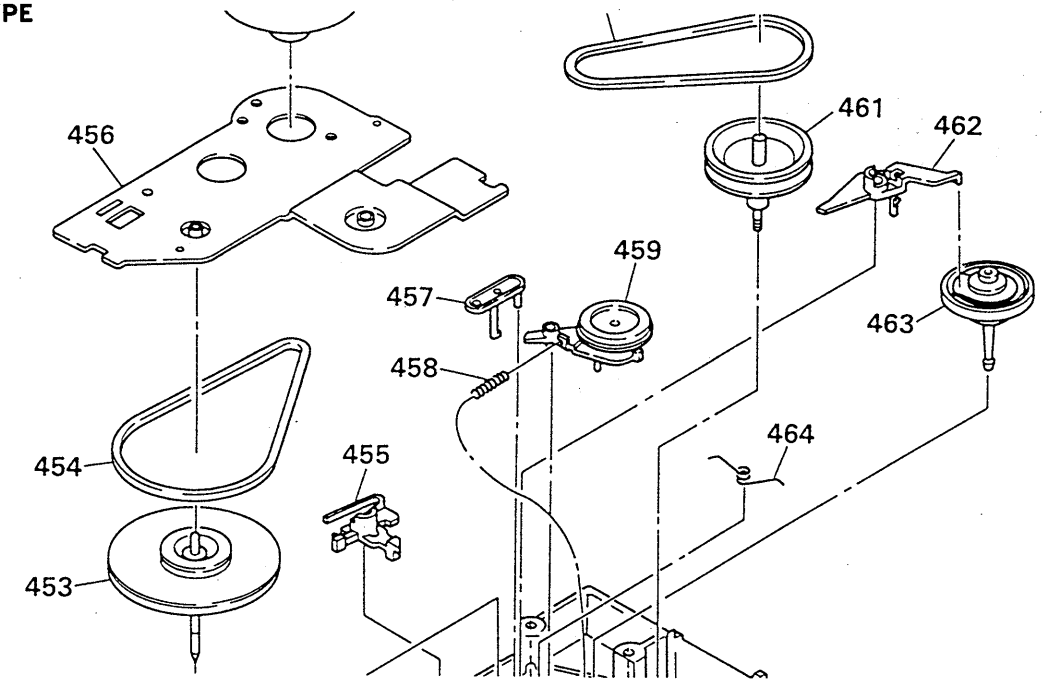
File this supplement with the service manual.

Subject: Change in the Mechanism Deck

The idler of the mechanism deck (MF-260-64PB) used for CFD-260 has been changed from tire drive to gear drive in design.
This change does not allow compatibility between the former and new parts.
When servicing and/or inspecting, check whether the idler (Ref. No. 459) is tire drive or gear drive in design.

☛ : indicates changed portion.

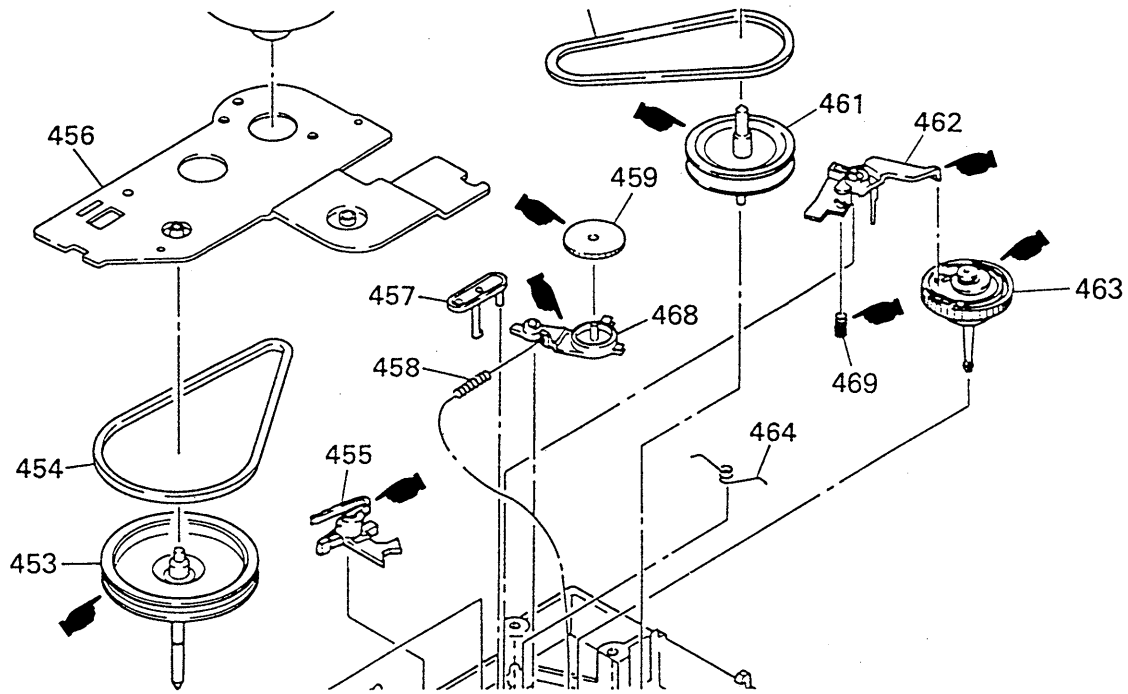
FORMER TYPE



Ref. No.	Part No.	Description	Remark
453	X-4920-349-1	WHEEL (S) ASSY, CAPSTAN	
455	4-928-987-01	LEVER (T), SHUT-OFF	
459	X-4920-346-2	LEVER (S) ASSY IDLER	

Ref. No.	Part No	Description	Remark
461	X-4918-580-1	PULLEY ASSY, FR	
462	4-928-986-01	LEVER (S), SHUT-OFF	
463	X-4918-582-1	PLATE ASSY, TAKE-UP REEL	

NEW TYPE



Ref. No.	Part No.	Description	Remark
453	X-4920-923-1	WHEEL (W) ASSY, CAPSTAN	
455	3-904-620-21	LEVER (S. OFF) (T)	
459	3-904-615-21	GEAR (FWD)	
461	X-3366-943-1	PULLEY ASSY, GEAR	

Ref. No.	Part No	Description	Remark
462	3-904-621-21	LEVER (S. OFF) (S)	
463	X-3366-942-1	LIMITER ASSY, FWD	
468	3-904-619-21	LEVER (FWD)	
469	3-904-617-01	SPRING, COMPRESSION	

9-957-631-81

Sony Corporation
Consumer A & V Products Company
Personal A & V Products Div.

English
94F0448-1D
Printed in Japan
© 1994. 6
Published by Home A & V Products Div.
Quality Engineering Dept.